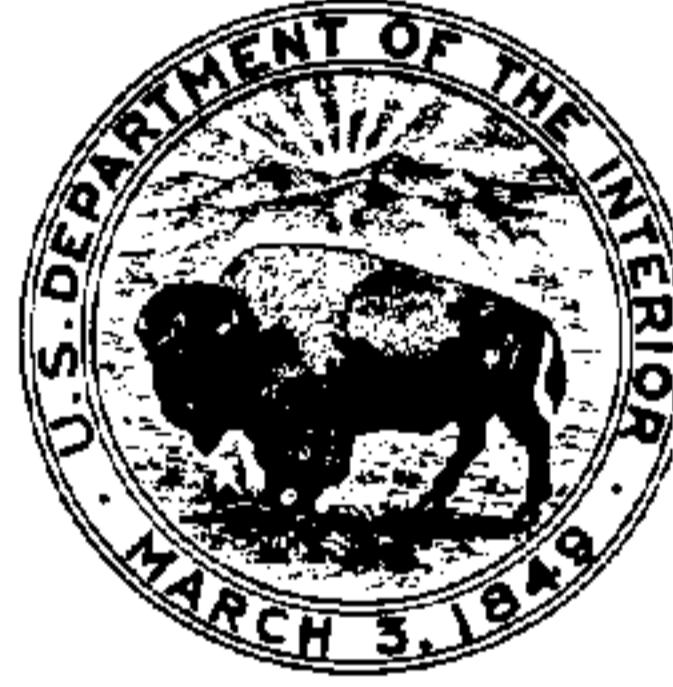


UNITED STATES DEPARTMENT OF THE INTERIOR, Stewart L. Udall, *Secretary*
FISH AND WILDLIFE SERVICE, Clarence F. Pautzke, *Commissioner*
BUREAU OF COMMERCIAL FISHERIES, Donald L. McKernan, *Director*

**COUNTS OF RED-TIDE ORGANISMS, *Gymnodinium breve*, AND ASSOCIATED OCEANOGRAPHIC DATA
FROM FLORIDA WEST COAST,
1960-61**

by

Alexander Dragovich, John H. Finucane, John A. Kelly, Jr.,
and
Billie Z. May



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ABSTRACT

This report presents counts of the red-tide organisms, *Gymnodinium breve*, and associated oceanographic data for the period from January 1960 to August 1961. Methods of collecting and analyzing samples are mentioned. Data on water temperature, water transparency, light transmission, cloud type, cloud amount, visibility, sea direction, sea state, wind direction, wind force, salinity, inorganic phosphate phosphorus, total phosphate phosphorus, nitrate-nitrite nitrogen, ammonia, total organic and inorganic nitrogen, silicon, calcium, and alkalinity are presented. These data were collected as a part of a study on the distribution and incidence of *G. breve* and related ecological conditions and extend the records reported in a previous paper from 1959 to 1961.

INTRODUCTION

This is the sixth report on field studies of the red tide in Florida's coastal waters by the Bureau of Commercial Fisheries. It presents counts of the red-tide organism, *Gymnodinium breve* Davis, with associated oceanographic data. In our previous investigations (Finucane and Dragovich, 1959; Dragovich, Finucane, and May, 1961), copper studies were made because of high toxicity of this element to laboratory cultures of *G. breve*. A preliminary analysis of copper data has shown that the natural levels of this constituent in Tampa Bay and adjacent neritic waters are not immediately toxic to *G. breve*. Thus, the

collection of water samples for copper determinations was discontinued. Calcium, silicon, alkalinity, ammonia, total organic and inorganic nitrogen, and light transmission measurements were added as new parameters to this study. The first two reports were by Graham, Amison, and Marvin (1954) and Marvin (1955a). A brief history and objectives of the red-tide studies with the counts of *G. breve* and associated oceanographic data for the period 1954-57 were presented in the third report (Finucane and Dragovich, 1959). The fourth report (Dragovich, Finucane, and May, 1961) covers the period from July 1957 through December 1959 and also presents the counts of *G. breve* with associated oceanographic data.

The fifth report (Dragovich, 1961) presents counts of *G. breve* with associated plankton and hydrological data at Naples, Florida, for the period from March 1956 to August 1957.

Hutton (1956) listed most of the earlier publications pertaining to the Florida red tide. More recent contributions dealing with the Florida red tide were made by Wilson and Ray (1956), Bein (1957), Ray and Wilson (1957), Collier (1958), Rounsefell and Evans (1958), Ingle, Hutton, Shafer, and Goss (1959), Aldrich and Wilson (1960), Hutton (1960), Dragovich and May (1962) and Dragovich (1963).

This report presents the continuation of the data from part II by Dragovich, Finucane, and

May (1961). The data in this report were obtained from the 25 regular stations located in Tampa Bay and adjacent neritic waters extending to 40 miles offshore distance (figs. 1 and 2). Occasionally two special stations were sampled at 50 and 60 miles offshore distance (figs. 1-2).

During the period of this report two minor outbreaks of red tide occurred in our investigation area. The first was observed in March 1960 and the second during July and August of the same year. Both of these outbreaks were confined mainly to an area from the mouth of Tampa Bay to 35 miles offshore, and little fish mortality was observed.

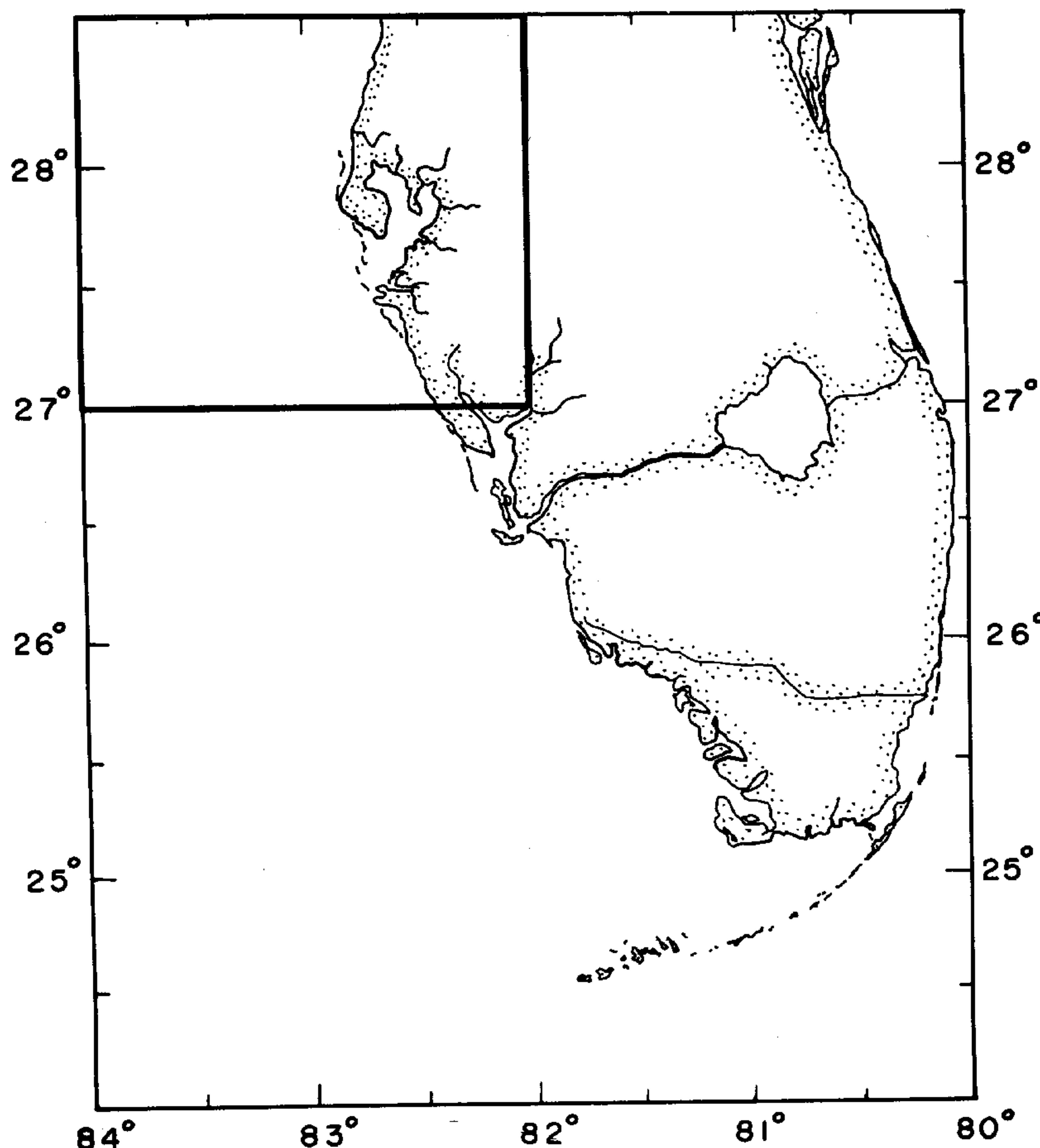


Figure 1.--Index map of southern Florida with outline of investigation area.

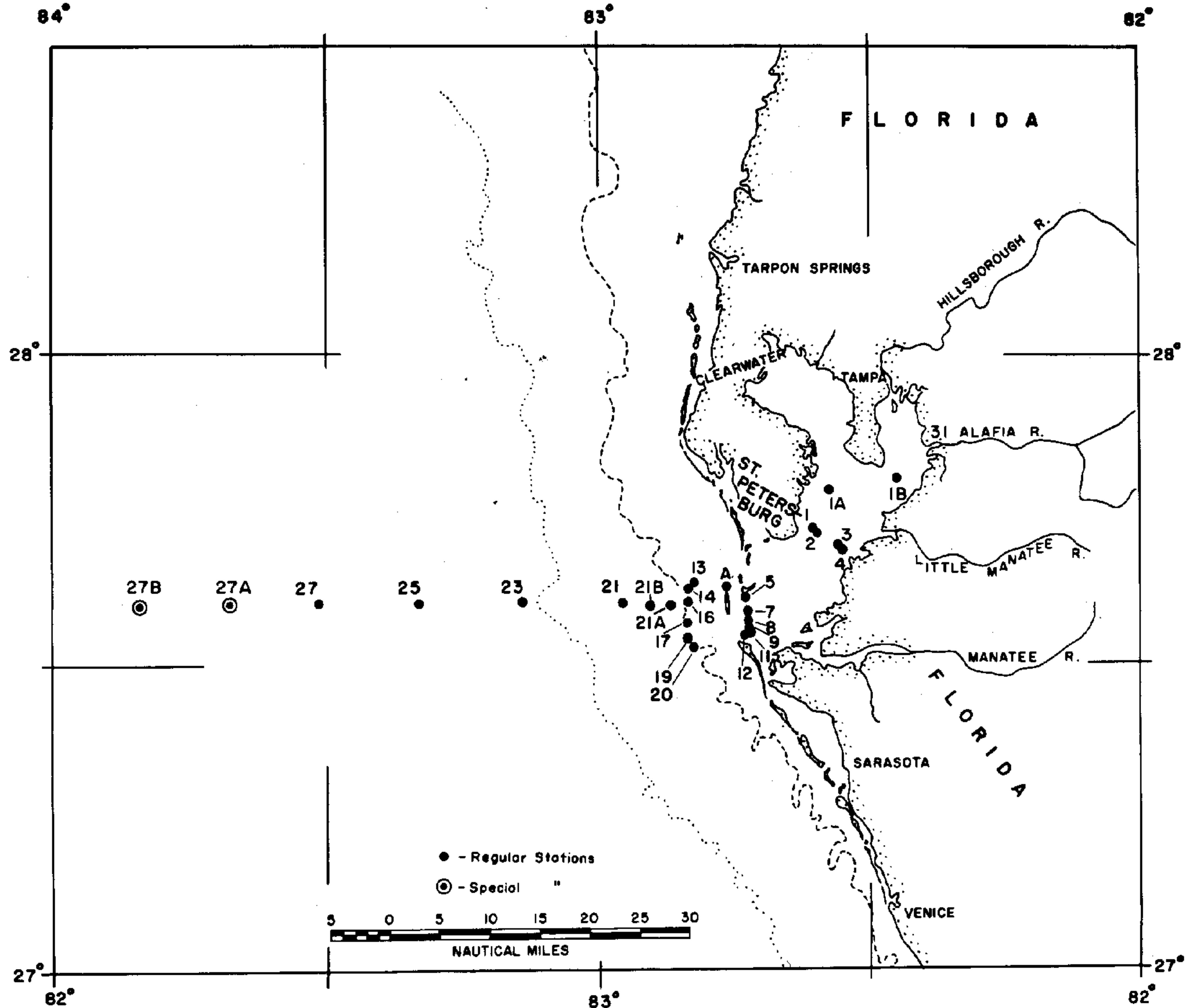


Figure 2.--Tampa Bay area showing station locations.

METHODS

Sampling Techniques

The entire sampling was conducted from the research vessel *Kingfish*, a 43-foot, twin-screw, diesel cruiser, equipped with an echo sounder and radar.

Water samples were collected with modified Van Dorn sampling bottles (Van Dorn, 1957) from three or four evenly spaced depths, including surface and bottom. Samples for the determination of ammonia and total and inorganic nitrogen were collected at selected stations and from the surface only. Samples for total phosphate-phosphorus, inorganic phosphate-phosphorus, nitrate-nitrite nitrogen,

and ammonia were immediately transferred from the sampling containers into 200-mm. culture vials which were capped with polyethylene-lined screw caps and quickly frozen. Samples for the determination of total inorganic and organic nitrogen were transferred into 250-ml. glass containers, quickly frozen and also capped with polyethylene-lined screw caps. Samples for the determination of calcium were transferred into 250-ml. glass-stoppered bottles. Samples for the determination of silicon were transferred into 125-ml. polyethylene containers with polyethylene screw caps. Samples for salinity determinations were transferred into 4-ounce glass prescription bottles and for alkalinity measurements 100-ml. samples were transferred into 250-ml.

glass bottles which contained 25 ml. of 0.01N HCL. All containers used for sampling were chemically cleaned prior to use.

Water temperatures were measured with a thermistor to the nearest tenth of a degree centigrade.

Light measurements (in microamps) were made with deck cell and sea cell and recorded as percentage of light penetration to the nearest tenth of a percent. Surface photometer readings were taken at approximately 2 feet below the surface. Secchi disc readings were also made and they were recorded to the nearest one-half foot.

Cloud type, cloud amount, sea state, visibility, water color, and Secchi disc readings were estimated by the observers and coded as indicated in the section on the explanation of column headings. Wind direction and sea direction were given by points of the compass and are accurate to $\pm 10^\circ$.

All stations were sampled at high tide ± 1 hour, with the exception of the offshore stations 21A, 21B, 21, 23, 25, 27, 27A and 27B, which were sampled without regard to the tidal stage.

Enumeration of *Gymnodinium breve*

Counts of *G. breve* were made according to the enumeration method described by Dragovich, Finucane, and May (1961).

Chemical Analysis

Salinities were determined by the Mohr-Knudsen method (Knudsen, 1901).

Nitrate-nitrite nitrogen determinations were made by the method of Zwicker and Robinson (1944) as modified by Marvin (1955b). Due to the formation of color in the blanks employed in the $\text{NO}_3 - \text{NO}_2$ analysis, the accuracy of the method for the low ranges encountered was found to be $\pm 0.2 \mu\text{g.at./l.}$ of $\text{NO}_3-\text{NO}_2-\text{N}$.

Ammonia determinations were made according to the Wirth and Robinson (1933) method. Since a number of substances interfere with the Nessler reaction when ammonia

concentrations are low, accuracy better than ± 0.1 to $0.2 \mu\text{g.at./l.}$ cannot be attained in the range measured here.

Inorganic nitrogen was distilled as ammonia from an alkaline solution and measured colorimetrically using sodium phenate as reagent. After digestion with sulfuric acid, the residue was again made alkaline and the organic nitrogen was acquired and measured the same as for the inorganic determination. No samples were filtered prior to analysis. This procedure was developed as a microanalytical method by Willis.¹

Calcium determinations were made according to the de Sousa (1954) method.

Alkalinity measurements were made by the method of Thompson and Anderson (1940).

The Harvey (1948) method was used for determinations of total phosphate-phosphorus and the method of Robinson and Thompson (1948) was used in inorganic phosphate-phosphorus determinations.

Concentrations of silicon were determined by the Armstrong (1951) method.

Some of the phosphorus, silicon, and total organic nitrogen values are listed as greater than a given value. This notation indicates that the field sample value exceeded the upper limit of the calibration curve. The given value represents the upper limit of the particular calibration curve established at the time of the determination.

None of the samples were filtered prior to the chemical analyses.

ACKNOWLEDGMENT

McKinley W. Jambor and Lucius Johnson assisted in the enumeration of *G. breve* and chemical analyses respectively.

Robert M. Ingle and Robert F. Hutton from the Florida State Board of Conservation cooperated by exchange of red tide information.

¹David C. Willis. 1960. A microanalytical method for the analysis of total nitrogen in sea water. (Type-written manuscript on file at the University of Tampa.)

LITERATURE CITED

- ALDRICH, DAVID V., and WILLIAM B. WILSON.
1960. The effect of salinity on growth of *Gymnodinium breve* Davis. Biological Bulletin, vol. 119, no. 1, p. 57-64.
- ARMSTRONG, F. A. J.
1951. The determination of silicate in sea water. Journal of the Marine Biological Association of the United Kingdom, vol. 30, p. 149-160.
- BEIN, SELWYN JACK.
1957. The relationship of total phosphorus concentration in sea water to red tide blooms. Bulletin of Marine Science of the Gulf and Caribbean, vol. 7, no. 4, p. 316-329.
- COLLIER, ALBERT.
1958. Some biochemical aspects of red tides and related oceanographic problems. Limnology and Oceanography, vol. 3, no. 1, p. 33-39.
- DRAGOVICH, ALEXANDER.
1961. Relative abundance of plankton off Naples, Florida and associated hydrographic data, 1956-1957. U. S. Fish and Wildlife Service, Special Scientific Report--Fisheries No. 372, 41 p.
1963. Hydrology and plankton of coastal waters at Naples, Florida. Quarterly Journal of the Florida Academy of Sciences, vol. 26, no. 1, p. 22-47.
- DRAGOVICH, ALEXANDER, JOHN H. FINUCANE, and BILLIE Z. MAY.
1961. Counts of red tide organisms, *Gymnodinium breve*, and associated oceanographic data from Florida west coast, 1957-59. U. S. Fish and Wildlife Service, Special Scientific Report--Fisheries No. 369, 175 p.
- DRAGOVICH, ALEXANDER, and BILLIE Z. MAY.
1962. Hydrological characteristics of Tampa Bay tributaries. U. S. Fish and Wildlife Service, Fishery Bulletin No. 205, p. 163-176.

FINUCANE, JOHN H., and ALEXANDER DRAGOVICH.

1959. Counts of red tide organisms, *Gymnodinium breve*, and associated oceanographic data from Florida west coast, 1954-57. U. S. Fish and Wildlife Service, Special Scientific Report--Fisheries No. 289, 220 p.

GRAHAM, HERBERT W., JOHN M. AMISON, and KENNETH T. MARVIN.

1954. Phosphorus content of waters along the west coast of Florida. U. S. Fish and Wildlife Service, Special Scientific Report--Fisheries No. 122, 43 p.

HARVEY, H. W.

1948. Estimation of phosphate and total phosphorus in sea water. Journal of the Marine Biological Association of the United Kingdom, vol. 27, no. 2, p. 337-359.

HUTTON, ROBERT F.

1956. An annotated bibliography of red tides occurring in the marine waters of Florida. Quarterly Journal of the Florida Academy of Science, vol. 19, nos. 2-3, p. 124-146.

1960. Notes on the causes of discolored water along the southwestern coast of Florida. Quarterly Journal of the Florida Academy of Science, vol. 23, no. 2, p. 163-164.

INGLE, R. M., R. F. HUTTON, H. E. SHAFFER, JR., and R. GOSS.

1959. The airplane as an instrument in marine research. Part 1. Dinoflagellate blooms. Florida State Board of Conservation, Special Scientific Report No. 3, 25 p.

KNUDSEN, M.

1901. Hydrographical tables, G. E. C. Gad, Copenhagen, 63 p.

MARVIN, KENNETH T.

- 1955a. Oceanographic observations in west coast Florida waters, 1949-52. U. S. Fish and Wildlife Service, Special Scientific Report--Fisheries No. 149, 32 p.

MARVIN, KENNETH T.--Cont.

1955b. Notes on the precision of a modified routine nitrate-nitrite analysis. *Journal of Marine Research*, vol. 14, no. 1, p. 79-87.

RAY, S. M., and W. B. WILSON.

1957. Effects of unicellular and bacteria-free cultures of *Gymnodinium brevis* on fish. U. S. Fish and Wildlife Service, Special Scientific Report--Fisheries 211, 50 p. [Also as *Fishery Bulletin* 123, vol. 57, p. 469-496.]

ROBINSON, REX J., and THOMAS G. THOMPSON.

1948. The determination of phosphates in sea water. *Journal of Marine Research*, vol. 7, no. 1, p. 33-41.

ROUNSEFELL, GEORGE A., and JOHN E. EVANS.

1958. Large-scale experimental test of copper sulfate as a control for the Florida red tide. U. S. Fish and Wildlife Service, Special Scientific Report--Fisheries No. 270, 57 p.

SOUSA, ARTHUR, DE.

1954. La determination rapide du calcium et du magnésium dans l'eau de mer. *Analytica Chimica Acta*, vol. 11, p. 221-224.

THOMPSON, THOMAS G., and DON H. ANDERSON.

1940. The determination of the alkalinity of sea water. *Journal of Marine Research*, vol. 3, no. 2, p. 224-229.

WILSON, W. B., and S. M. RAY.

1956. The occurrence of *Gymnodinium brevis* in the western Gulf of Mexico. *Ecology*, vol. 37, no. 2, 388 p.

WIRTH, H. E., and R. J. ROBINSON.

1933. Photometric investigation of Nessler reaction and Witting method for determination of ammonia in sea water. *Industrial and Engineering Chemistry*, Analytical Edition, vol. 5, p. 293.

VAN DORN, W. G.

1957. Large-volume water sampler. *Transactions of the American Geophysical Union*, vol. 37, no. 6, p. 682-684.

ZWICKER, B. M. G., and R. J. ROBINSON.

1944. The photometric determination of nitrate in sea water with a strychnidine reagent. *Journal of Marine Research*, vol. 5, no. 3, p. 214-231.

STATION DATA

EXPLANATION OF COLUMN HEADINGS

Date Month, day, and year are given

Time Eastern standard time

Depth Depth is coded as indicated below:

For stations 1A through 21B:

Code

S Surface

M Middepth

B Bottom

For stations from 21 through 27B:

1. Surface

2. First intermediate

3. Second intermediate

4. Bottom

C Concentrated sample

M Mixed sample

°C Water temperature recorded to the nearest 10th of a degree centigrade

Sal Salinity, parts per thousand $\frac{\circ}{\text{o}}$

Ca Calcium, mg.at./l.

Alk Total alkalinity, expressed in mg.at. H⁺ per liter

Si Silicon, $\mu\text{g}.\text{at}./\text{l}$.

NO₃-NO₂-N Nitrogen, $\mu\text{g}.\text{at}.$ NO₃-NO₂-N/l.

PO₄ Phosphate

In. Inorganic phosphate, $\mu\text{g}.\text{at}.$ PO₄-P/l.

Tot. Total phosphate, $\mu\text{g}.\text{at}.$ PO₄-P/l.

Light Transm. Light transmission expressed in percent, to the nearest tenth

Sea State

Sea state is coded as indicated below:

<u>Code</u>	<u>Approximate height in feet</u>	<u>Description</u>
0		Calm
1	Less than 1	Smooth
2	1 to 3	Slight
3	3 to 5	Moderate
4	5 to 8	Rough
5	8 to 12	Very rough

Wind Amt.

Wind speed is given in knots according to the Beaufort scale

Sea Amt.

page 187, H.O. Pub. No. 607, 1955

**Wind Dir.
and
Sea Dir.**

Wind direction and sea direction given by points of the compass

Surface Nitrogen values:NH₃ Ammonia, $\mu\text{g.at./l.}$ Org. Total organic nitrogen, $\mu\text{g.at./l.}$ In. Total inorganic nitrogen, $\mu\text{g.at./l.}$ **Vi**

Visibility is coded as indicated below:

Code

0	Dense fog	50 yards
1	Thick fog	200 yards
2	Fog	400 yards
3	Moderate fog	1,000 yards
4	Thin fog or mist	1 mile
5	Visibility poor	2 miles
6	Visibility moderate	5 miles
7	Visibility good	10 miles
8	Visibility very good	30 miles
9	Visibility excellent over	30 miles

CA

Cloud amount is coded as indicated below:

CodeFraction of sky obscured

0

0

1 Less than 1/10 and 1/10

2 2/10 and 3/10

3 4/10

4 5/10

5 6/10

6 7/10 and 8/10

7 9/10 and 9/10 plus

8 10/10

CT

Cloud type is coded as indicated below:

Code

0	Stratus or Fractostratus
1	Cirrus
2	Cirrostratus
3	Cirrocumulus
4	Altocumulus
5	Altostratus
6	Stratocumulus
7	Nimbostratus
8	Cumulus or Fractocumulus
9	Cumulonimbus

WC

Water color is coded as indicated below:

Code

Br.	Brown
L. Br.	Light Brown
D. Br.	Dark brown
R. Br.	Reddish brown
Br. G.	Brownish green
G.	Green
L. G.	Light green
D. G.	Dark green
M. G.	Milky green
B. G.	Blue green
B.	Blue

Transp.

Water transparency in feet at which Secchi disc is visible, recorded to the nearest one-foot.

STATION 1A				Depth of 39 feet				Lat. 27°47.6' N.				Long. 83°34.4' W.												
Date	Time	Depth	C M	Gymnodinium breve	°C.	Sal.	Ca	Alk	Si	In	PO ₄	Nitrogen	Water	Sky	Wind	Sea								
										In	PO ₄	NH ₃	Color	CA	CT	Vi								
										PO ₄	Tot	NO ₃	Org	In	Light	Transp								
										NO ₂ -N	NO ₂ -N	NO ₂ -N	transm	transm	transm	transm								
1960	1/26	1526	S	0	-	13.4	24.09	-	-	18.0	22.8	0.2	-	-	-	6	D.G.	1	-	0	-	0		
-	-	M	0	-	14.0	24.63	-	-	-	20.5	23.1	0.2	-	-	-	-	D.G.	7	1	-	2	NNE		
-	-	B	0	-	13.0	24.70	-	-	-	19.2	21.7	0.3	-	-	-	-	10	D.G.	7	1	-	2	NNE	
2/16	1543	S	0	-	17.2	23.48	-	-	-	23.6	23.6	0.2	-	-	-	-	D.G.	7	1	-	2	NNE		
-	-	M	0	-	15.9	23.75	-	-	-	23.9	24.0	0.2	-	-	-	-	D.G.	7	1	-	2	NNE		
-	-	B	0	-	15.9	23.75	-	-	-	24.3	27.4	0.5	-	-	-	-	D.G.	7	1	-	2	NNE		
3/29	1514	S	0	-	21.2	15.33	-	-	-	22.2	28.3	0.2	-	-	-	-	D.B.R.	2	6	-	5	SW		
-	-	M	0	-	19.8	17.20	-	-	-	22.5	24.6	0.2	-	-	-	-	D.B.R.	2	6	-	5	SW		
-	-	B	0	-	19.8	17.74	-	-	-	23.0	25.0	0.2	-	-	-	-	D.B.R.	2	6	-	5	SW		
4/14	1539	S	0	-	21.7	17.30	5.12	1.80	7.5	-	23.7	0.2	14.1	-	-	-	Br.G.	6	8	7	3	E		
-	-	M	0	-	20.7	17.88	5.33	1.83	7.0	-	22.5	0.2	14.1	-	-	-	Br.G.	6	8	7	3	E		
-	-	B	0	-	20.6	18.01	5.41	1.84	6.6	-	25.6	0.4	14.1	-	-	-	Br.G.	6	8	7	3	E		
5/10	1337	S	0	-	24.2	22.61	6.92	2.02	1.8	-	22.6	0.4	10.6	-	-	-	D.G.	2	8	8	4	W		
-	-	M	0	-	24.1	22.68	6.79	2.05	1.6	-	21.1	0.5	10.6	-	-	-	D.G.	2	8	8	4	W		
-	-	B	0	-	24.1	22.61	6.79	2.01	1.8	-	22.0	0.2	10.6	-	-	-	D.G.	2	8	8	4	W		
6/22	1254	S	0	-	28.2	24.81	7.65	1.98	0.8	-	22.7	0.5	10.6	-	-	-	D.G.	7	8	8	0	-		
-	-	M	0	-	27.8	25.35	7.85	2.06	2.1	-	24.8	0.1	10.6	-	-	-	D.G.	7	8	8	0	-		
-	-	B	0	-	27.8	25.37	7.75	2.09	2.6	-	28.0	0.2	10.6	-	-	-	D.G.	7	8	8	0	-		
7/19	1109	S	0	-	30.7	25.23	7.80	2.13	6.3	-	20.9	0.0	7.1	-	-	-	Br.G.	2	8	6	2	NE		
-	-	M	0	-	30.1	25.41	7.85	2.17	9.0	-	21.0	0.1	7.1	-	-	-	Br.G.	2	8	6	2	NE		
-	-	B	0	-	30.1	25.52	7.80	2.12	10.0	-	22.7	0.0	7.1	-	-	-	Br.G.	2	8	6	2	NE		
8/18	1131	S	0	-	29.9	15.05	4.80	1.76	0.8	-	21.1	0.1	7.6	-	-	-	Br.G.	2	8	6	2	NE		
-	-	M	0	-	29.3	19.22	6.01	2.04	3.3	-	29.0	0.1	7.6	-	-	-	Br.G.	2	8	6	2	NE		
-	-	B	0	-	30.0	24.49	7.53	1.95	15.5	-	24.2	0.1	7.6	-	-	-	Br.G.	2	8	6	2	NE		
9/20	1401	S	0	-	28.8	15.14	4.80	1.83	12.9	-	27.9	0.1	30.0	-	-	-	Br.G.	2	8	7	1	N		
-	-	M	0	-	27.9	17.38	5.38	1.87	15.7	-	26.7	0.1	30.0	-	-	-	Br.G.	2	8	7	1	N		
-	-	B	0	-	28.0	19.51	6.03	1.95	15.5	-	26.8	0.1	30.0	-	-	-	Br.G.	2	8	7	1	N		
10/3	1324	S	0	-	29.1	15.91	4.94	1.25	21.7	-	29.0	0.5	10.0	-	-	-	Br.G.	2	8	7	1	N		
-	-	M	0	-	28.1	16.64	5.10	1.25	19.6	-	21.1	0.3	1.8	-	-	-	Br.G.	2	8	7	1	N		
-	-	B	0	-	28.0	16.92	5.20	1.25	18.4	-	27.6	0.1	10.0	-	-	-	Br.G.	2	8	7	1	N		
11/19	1550	S	0	-	24.0	21.08	6.55	2.16	2.4	-	21.1	0.3	1.8	-	-	-	Br.G.	2	8	7	1	N		
-	-	M	0	-	23.1	22.81	7.10	2.16	7.8	-	21.6	0.1	1.8	-	-	-	Br.G.	2	8	7	1	N		
-	-	B	0	-	23.0	23.22	7.30	2.19	9.4	-	19.2	0.2	1.8	-	-	-	Br.G.	2	8	7	1	N		
12/19	1708	S	0	-	13.6	24.49	7.58	2.24	4.7	-	23.5	0.3	4.7	-	-	-	Br.G.	1	8	6	2	NW		
-	-	M	0	-	13.9	25.41	7.94	2.29	4.6	-	21.1	0.3	4.7	-	-	-	Br.G.	1	8	6	2	NW		
-	-	B	0	-	14.7	25.41	7.70	2.24	4.4	-	21.9	0.4	4.7	-	-	-	Br.G.	1	8	6	2	NW		
1961	1546	S	0	-	14.3	25.64	8.05	2.16	2.7	-	24.5	0.3	1.2	20.9	6.7	22.8	-	D.G.	6	2,8	7	0	-	
-	-	M	0	-	14.5	26.08	8.10	2.19	3.2	-	22.4	0.1	1.2	20.9	6.7	22.8	-	D.G.	6	2,8	7	0	-	
-	-	B	0	-	14.5	25.86	8.00	2.19	3.6	-	23.5	0.2	1.2	20.9	6.7	22.8	-	D.G.	6	2,8	7	0	-	
2/27	1428	S	0	-	21.0	25.25	8.10	2.14	5.7	-	23.0	0.2	2.4	24.0	5.6	50.0	9.4	D.G.	0	-	-	7	2	NW
-	-	M	0	-	20.0	25.43	7.90	2.12	8.2	-	20.0	0.2	2.4	24.0	5.6	50.0	9.4	D.G.	0	-	-	7	2	NW
-	-	B	0	-	19.7	25.46	7.88	2.19	9.3															

STATION 1B	Depth of 39 feet			Lat. 27° 48.7' N.			Long. 82° 26.8' W.															
	Date	Time	Depth	Gymnodinium C	breve M	•C	Sal	Ca	Alk	Si	Phosphorus PO ₄	NO ₃ - In	NH ₃ - Org	In	Light transm	Water transm	Sky transm	Wind Dir	Sea Dir			
T960	1/26	1454	S	0	-	13.8	22.97	-	-	-	23.9	28.6	1.0	-	-	7	D.G.	-	-			
-	-	M	0	-	12.8	24.00	-	-	-	-	21.9	22.3	0.6	-	-	-	-	2	NE	0		
-	-	B	0	-	13.1	24.36	-	-	-	-	21.2	23.2	0.4	-	-	-	7½	D.G.	8	1	-	
2/16	1614	S	0	-	15.7	22.09	-	-	-	-	23.0	23.2	1.0	-	-	-	-	-	0	-	0	
-	-	M	0	-	15.7	23.06	-	-	-	-	21.6	25.8	0.4	-	-	-	-	-	-	-	-	
-	-	B	0	-	15.8	23.39	-	-	-	-	19.6	25.2	0.5	-	-	-	-	-	-	-	-	
3/29	1442	S	0	-	21.0	12.70	-	-	-	-	24.6	24.7	1.7	-	-	-	-	5	D.B.R.	3	6	-
-	-	M	0	-	18.8	15.93	-	-	-	-	22.3	34.7	0.8	-	-	-	-	5	D.B.R.	3	6	-
-	-	B	0	-	18.7	16.83	-	-	-	-	24.0	32.3	0.4	-	-	-	-	-	-	-	-	
4/14	1509	S	0	-	21.6	16.76	5.04	1.78	9.2	-	24.0	0.4	17.1	-	-	-	-	12	Br.G.	6	8	7
-	-	M	0	-	21.0	17.30	5.18	1.84	9.0	-	24.2	0.3	17.1	-	-	-	-	5	Br.G.	2	8	8
-	-	B	0	-	20.8	19.49	5.72	1.92	6.5	-	28.7	0.2	-	-	-	-	-	5	Br.G.	2	8	4
5/10	1301	S	0	-	24.0	21.69	6.67	2.10	4.8	-	21.9	-	14.1	-	-	-	-	4	D.G.	7	8	0
-	-	M	0	-	24.0	21.94	6.76	2.00	4.2	-	25.3	0.1	-	-	-	-	-	4	D.G.	7	8	0
-	-	B	0	-	24.5	23.08	6.98	2.02	6.5	-	25.3	0.2	-	-	-	-	-	4	D.G.	7	8	0
6/22	1221	S	0	-	29.6	24.24	7.54	1.99	2.2	-	25.3	0.1	-	-	-	-	-	8	Br.G.	3	4.8	7
-	-	M	0	-	28.0	25.08	7.76	1.98	6.5	-	25.9	0.2	-	-	-	-	-	4	R.B.R.	2	8	7
-	-	B	0	-	28.0	25.66	7.95	2.09	11.1	-	25.3	0.2	-	-	-	-	-	4	R.B.R.	2	8	7
7/19	1037	S	0	-	30.3	23.30	7.22	2.06	11.0	-	25.4	0.0	6.5	-	-	-	-	5½	Br.	2	8	6
-	-	M	0	-	30.3	24.42	7.60	2.10	9.8	-	22.6	0.1	-	-	-	-	-	5½	Br.	2	8	6
-	-	B	0	-	30.4	24.76	7.65	2.08	10.6	-	26.6	0.0	-	-	-	-	-	5½	Br.	2	8	6
8/18	1054	S	0	-	29.4	14.60	4.70	1.75	2.9	-	24.4	0.1	8.8	-	-	-	-	5½	Br.	2	8	6
-	-	M	0	-	30.0	23.69	7.33	2.11	11.2	-	22.4	0.2	-	-	-	-	-	5½	Br.	2	8	6
-	-	B	0	-	30.0	24.24	7.50	2.10	12.5	-	22.9	0.1	-	-	-	-	-	5½	Br.	2	8	6
9/20	1322	S	0	-	27.8	18.78	5.76	1.87	16.4	-	27.9	0.1	4.1	-	-	-	-	5½	R.B.R.	2	8	7
-	-	M	0	-	27.8	17.02	5.30	1.87	12.7	-	24.7	0.1	-	-	-	-	-	5½	R.B.R.	2	8	7
-	-	B	0	-	28.4	19.33	5.94	1.46	19.6	-	27.6	0.1	-	-	-	-	-	4	R.B.R.	3	8	4
10/3	1250	S	0	-	28.5	14.78	4.64	1.22	>21.7	-	28.4	0.2	5.9	-	-	-	-	4	R.B.R.	3	8	4
-	-	M	0	-	28.4	17.14	5.26	1.31	>21.7	-	29.0	0.2	-	-	-	-	-	4	R.B.R.	3	8	4
-	-	B	0	-	28.4	19.33	5.94	1.46	19.6	-	27.6	0.1	-	-	-	-	-	4	R.B.R.	3	8	4
11/19	1513	S	0	-	24.0	22.95	7.21	2.15	4.2	-	22.7	0.0	1.8	-	-	-	-	26.2	-	-	-	
-	-	M	0	-	23.4	23.13	7.21	2.16	8.8	-	24.0	0.0	-	-	-	-	-	26.2	-	-	-	
-	-	B	0	-	23.0	23.59	7.34	2.18	11.4	-	22.8	0.1	-	-	-	-	-	26.2	-	-	-	
12/19	1634	S	0	-	13.6	25.32	7.88	2.26	2.3	-	27.2	0.1	4.1	-	-	-	-	44.8	-	-	-	
-	-	M	0	-	13.6	25.37	8.05	2.24	2.5	-	21.2	0.1	-	-	-	-	-	44.8	-	-	-	
-	-	B	0	-	13.8	25.95	8.12	2.27	3.5	-	21.6	0.2	-	-	-	-	-	44.8	-	-	-	
1961	1512	S	0	-	15.1	24.90	7.86	2.16	2.0	-	26.8	0.1	0.0	30.9	2.9	-	-	37.5	-	-	-	
-	-	M	0	-	14.3	25.91	7.99	2.21	3.5	-	24.9	0.3	-	-	-	-	-	2.7	-	-	-	
-	-	B	0	-	14.3	26.17	8.17	2.22	3.2	-	25.2	0.3	-	-	-	-	-	2.7	-	-	-	
2/27	1353	S	0	-	20.7	23.37	7.57	2.06	5.8	-	22.2	0.2	-	>28.6	0.9	-	-	35.7	3	Br.G.	0	
-	-	M	0	-	19.6	25.28	7.98	2.19	8.7	-	22.4	0.2	-	-	-	-	-	1.8	-	-	-	
-	-	B	0	-	20.1	25.82	8.15	2.25	12.7	-	23.6	0.2	-	-	-	-	-	0.0	-	-	-	
3/7	1616	S	0	-	23.3	24.22	7.75	2.08	1.3	-	>33.3	0.2	-	>28.6	2.0	-	-	31.5	5	D.G.	5	
-	-	M	0	-	23.0	24.96	7.86	2.10	5.6	-	>33.3	0.2	-	-	-	-	-	0.7	-	-	-	
-	-	B	0	-	22.4	25.46	8.04	2.16	7.4	-	>33.3	0.2	-	-	-	-	-	<0.1	-	-	-	
5/10	1129	S	0	-	25.9	26.47	8.33	2.05	0.5	-	>31.8	0.0										

STATION 1	Depth of 26 feet				Lat. 27°43.1' N.				Long. 36°36.5' W.															
	Gymnodinium		breve	•C	Sal	Ca	Alk	Si	Phosphorus		Nitrogen		In	Light transm	Water Transp	Color CA	Sky CT	Wind Dir	Sea					
Date	Time	Depth	C	M	In	PO ₄	N _{tot}	NO ₃	NO ₂ -N	Org	In	Light transm	Water Transp	Color CA	Sky CT	Wind Dir	Amt Dir	Sea						
1960	1/13	1430	S	0	-	20.8	25.01	-	-	19.6	19.6	0.1	-	-	6	Br. G.	2	-	WSW 0					
-	-	M	0	-	20.4	25.57	-	-	18.7	20.0	0.2	-	-	8	D. G.	8	1	-	E 0					
-	-	B	0	-	20.5	25.57	-	-	18.7	19.4	0.1	-	-	5	D. Br.	2	6	-	SW 2					
2/16	1520	S	0	•C	15.9	25.12	-	-	19.5	23.5	0.4	-	-	5	D. Br.	2	6	-	SW 2					
-	-	M	0	0.0	15.8	25.35	-	-	19.2	23.5	0.2	-	-	5	D. Br.	2	6	-	SW 2					
-	-	B	0	-	16.1	25.48	-	-	19.0	22.4	0.2	-	-	5	D. Br.	2	6	-	SW 2					
3/29	1356	S	0	-	20.8	20.28	-	-	22.3	24.8	0.3	-	-	5	Br. G.	6	8	7	E 1 NE					
-	-	M	0	-	20.2	20.46	-	-	25.0	25.3	0.3	-	-	5	Br. G.	6	8	7	E 1 NE					
-	-	B	0	-	20.0	21.24	-	-	22.7	22.7	0.2	-	-	5	Br. G.	6	8	7	E 1 NE					
4/14	1425	S	0	-	21.8	21.08	6.32	2.05	0.5	-	21.4	0.0	8.8	-	-	5	Br. G.	6	8	7	E 1 NE			
-	-	M	0	-	21.5	22.00	6.46	2.05	0.6	-	21.2	0.0	8.8	-	-	5	Br. G.	6	8	7	E 1 NE			
-	-	B	0	-	21.3	22.21	6.67	2.08	0.6	-	20.1	0.1	8.8	-	-	5	Br. G.	6	8	7	E 1 NE			
5/10	1214	S	0	-	24.3	26.87	8.15	2.18	1.1	-	17.1	0.3	2.9	-	-	4½	L. G.	3	8	8	W 2 W			
-	-	M	0	-	24.2	26.94	8.05	2.21	1.2	-	16.8	0.2	2.9	-	-	4½	L. G.	3	8	8	W 2 W			
-	-	B	0	-	24.0	27.20	8.32	2.20	0.8	-	16.8	0.2	2.9	-	-	4½	L. G.	3	8	8	W 2 W			
6/22	1135	S	0	-	28.3	27.97	8.50	2.12	2.2	-	18.6	0.1	-	-	-	6½	D. G.	7	8	7	0	-	0	
-	-	M	0	-	28.1	28.19	8.60	2.13	2.0	-	17.4	0.1	-	-	-	6½	D. G.	7	8	7	0	-	0	
-	-	B	0	-	28.0	28.19	8.60	2.18	2.0	-	18.1	0.2	-	-	-	6½	D. G.	7	8	7	0	-	0	
7/19	0950	S	0	-	30.4	28.30	8.60	2.21	5.0	-	18.3	0.0	3.5	-	-	9	D. G.	3	4.8	7	1	S	1 SW	
-	-	M	0	-	30.2	28.31	8.65	2.24	4.9	-	17.7	0.0	3.5	-	-	9	D. G.	3	4.8	7	1	S	1 SW	
-	-	B	0	-	30.2	28.35	8.75	2.24	5.5	-	16.2	0.0	3.5	-	-	9	D. G.	3	4.8	7	1	S	1 SW	
8/18	1006	S	0	-	29.4	18.28	5.67	1.89	0.8	-	25.2	0.1	5.3	-	-	6	Br. G.	1	8	6	3	NE	2 NE	
-	-	M	0	-	29.3	19.00	5.88	1.92	0.7	-	21.8	0.1	5.3	-	-	6	Br. G.	1	8	6	3	NE	2 NE	
-	-	B	0	-	29.9	25.37	7.83	2.12	11.8	-	20.3	0.2	5.3	-	-	6	Br. G.	1	8	6	3	NE	2 NE	
9/20	1234	S	0	-	28.6	18.60	5.62	1.90	8.9	-	23.9	0.1	8.8	-	-	5	R. Br.	2	4.8	7	3	N	2 N	
-	-	M	0	-	28.0	19.00	5.75	1.90	7.6	-	25.6	0.0	8.8	-	-	5	R. Br.	2	4.8	7	3	N	2 N	
-	-	B	0	-	28.1	19.13	5.83	1.93	6.4	-	23.8	0.0	8.8	-	-	5	D. G.	3	8	8	4	NE	2 NE	
10/3	1205	S	0	-	28.2	20.55	6.40	1.57	6.7	-	24.1	0.1	1.8	-	-	5	D. G.	3	8	8	4	NE	2 NE	
-	-	M	0	-	28.2	20.90	6.36	1.62	5.6	-	28.1	0.0	1.8	-	-	5	D. G.	3	8	8	4	NE	2 NE	
-	-	B	0	-	28.1	21.35	6.50	1.62	4.3	-	27.2	0.3	1.8	-	-	5	D. G.	3	8	8	4	NE	2 NE	
11/19	1422	S	0	-	24.0	24.02	7.50	2.24	3.0	-	20.1	0.1	6.2	-	-	30.4	-	Br. G.	2	1,2,8	7	2	E	1 NE
-	-	M	0	-	23.7	24.52	7.62	2.22	3.5	-	22.2	0.2	6.2	-	-	30.4	-	Br. G.	2	1,2,8	7	2	E	1 NE
-	-	B	0	-	23.5	24.76	7.73	2.22	3.8	-	20.4	0.0	6.2	-	-	30.4	-	Br. G.	2	1,2,8	7	2	E	1 NE
12/19	1540	S	0	-	13.7	26.35	8.12	2.29	2.3	-	19.6	0.3	1.8	-	-	42.7	-	D. G.	1	8	7	0	-	1 N
-	-	M	0	-	13.7	26.53	8.26	2.30	2.2	-	20.5	0.2	1.8	-	-	42.7	-	D. G.	1	8	7	0	-	1 N
-	-	B	0	-	13.7	26.65	8.24	2.30	2.6	-	20.7	0.2	1.8	-	-	42.7	-	D. G.	1	8	7	0	-	1 N
1961	1/31	1427	S	0	-	14.5	27.07	8.23	2.30	2.6	-	23.1	0.1	19.7	0.4	50.0	-	D. G.	3	2,8	7	1	NW	1 NE
-	-	M	0	-	14.5	27.32	8.40	2.25	4.0	-	24.6	0.2	19.7	0.4	50.0	-	D. G.	3	2,8	7	1	NW	1 NE	
-	-	B	0	-	14.5	27.29	8.32	2.25	2.1	-	24.1	0.1	19.7	0.4	50.0	-	D. G.	3	2,8	7	1	NW	1 NE	
2/27	1310	S	0	-	20.4	26.38	8.20	2.13	4.2	-	22.9	0.2	25.9	3.1	54.8	9	D. G.	0	-	7	1	E	1 E	
-	-	M	0	-	19.8	26.31	8.21	2.10	3.6	-	23.4	0.6	25.9	3.1	54.8	9	D. G.	0	-	7	1	E	1 E	
-	-	B	0	-	19.8</																			

STATION 2 Depth of 15 feet Lat. 27°42.7' N.

Date	Time	Depth	Gymnodinium breve			C	Sal	Ca	Alk	Si	Phosphorus			Nitrogen			Water transm.	Light transm.	Color	CA	CT	Sky	Wind Dir	Sea Dir		
			C	M	In						PO ₄	NO ₃	NH ₃	Org	In	NO ₂ :N	Br. G.	-	-	5½	Br. G.	-	-	2 WSW	0	
1/13	1420	S	-	-	-	20.2	26.87	-	-	-	18.0	19.1	0.1	-	-	-	-	-	-	5½	Br. G.	-	-	-	2 WSW	0
-	-	M	-	-	-	20.1	25.97	-	-	-	18.3	19.1	0.1	-	-	-	-	-	-	5½	Br. G.	-	-	-	2 WSW	0
-	-	B	-	-	-	20.1	25.97	-	-	-	18.3	19.8	0.2	-	-	-	-	-	-	5½	Br. G.	-	-	-	2 WSW	0
2/16	1510	S	-	-	-	15.9	25.46	-	-	-	20.0	21.6	0.4	-	-	-	-	-	-	5	D. G.	6	1	-	1 NW	0
-	-	M	-	-	-	15.9	25.53	-	-	-	20.5	22.3	0.4	-	-	-	-	-	-	5	D. G.	6	1	-	1 NW	0
-	-	B	-	-	-	16.0	25.62	-	-	-	21.6	22.6	0.7	-	-	-	-	-	-	5	D. G.	6	1	-	1 NW	0
3/29	1344	S	-	-	-	20.2	20.79	-	-	-	21.0	30.0	0.3	-	-	-	-	-	-	3	L. Hr.	2	6	-	4 SW	2 SW
-	-	M	-	-	-	20.1	20.79	-	-	-	22.2	24.3	0.3	-	-	-	-	-	-	3	L. Hr.	2	6	-	4 SW	2 SW
-	-	B	-	-	-	20.1	20.79	-	-	-	22.0	23.2	0.3	-	-	-	-	-	-	3	L. Hr.	2	6	-	4 SW	2 SW
4/14	1408	S	-	-	-	21.4	23.77	7.07	2.18	0.8	-	19.7	0.2	-	-	-	-	-	-	5	Br. G.	6	8	7	4 E	1 NE
-	-	M	-	-	-	21.3	23.73	7.11	2.25	0.8	-	20.5	0.1	-	-	-	-	-	-	5	Br. G.	6	8	7	4 E	1 NE
-	-	B	-	-	-	21.2	23.73	7.11	2.29	0.9	-	20.5	0.1	-	-	-	-	-	-	5	Br. G.	6	8	7	4 E	1 NE
5/10	1156	S	-	-	-	24.5	27.50	8.38	2.22	1.5	-	15.9	0.2	-	-	-	-	-	-	6	G.	3	6	8	4 W	2 W
-	-	M	-	-	-	24.4	27.52	8.49	2.24	1.6	-	15.9	0.2	-	-	-	-	-	-	6	G.	3	6	8	4 W	2 W
-	-	B	-	-	-	24.4	27.57	8.38	2.24	1.6	-	16.1	0.3	-	-	-	-	-	-	6	D. G.	7	6,8	7	1 N	0
6/22	1123	S	-	-	-	28.1	28.55	8.66	2.17	2.3	-	16.8	0.2	-	-	-	-	-	-	6	D. G.	7	6,8	7	1 N	0
-	-	M	-	-	-	28.0	28.82	8.74	2.19	2.9	-	16.7	0.1	-	-	-	-	-	-	6	D. G.	7	6,8	7	1 N	0
-	-	B	-	-	-	28.0	28.82	8.80	2.19	3.0	-	18.1	0.1	-	-	-	-	-	-	6	D. G.	7	6,8	7	1 N	0
7/19	0932	S	-	-	-	30.6	28.59	8.75	2.24	5.8	-	18.7	0.0	-	-	-	-	-	-	8	D. G.	3	4,8	7	1 SW	1 SW
-	-	M	-	-	-	30.6	28.75	8.75	2.25	6.3	-	16.4	0.0	-	-	-	-	-	-	8	D. G.	3	4,8	7	1 SW	1 SW
-	-	B	-	-	-	30.6	28.93	8.82	2.26	6.7	-	16.3	-	-	-	-	-	-	-	8	D. G.	3	4,8	7	1 SW	1 SW
8/18	0957	S	-	-	-	29.2	19.36	6.15	1.93	2.1	-	23.1	0.2	-	-	-	-	-	-	7	R. Br.	8,7	4,8	7	3 N	2 N
-	-	M	-	-	-	29.2	19.69	6.10	1.97	0.9	-	25.2	0.1	-	-	-	-	-	-	7	R. Br.	8,7	4,8	7	3 N	2 N
-	-	B	-	-	-	29.9	25.72	7.84	2.12	10.8	-	18.9	0.1	-	-	-	-	-	-	7	R. Br.	8,7	4,8	7	3 N	2 N
9/20	1224	S	-	-	-	28.4	17.23	5.35	1.83	9.0	-	24.2	0.0	-	-	-	-	-	-	4	Br. G.	3	6	8	4 NE	2 NE
-	-	M	-	-	-	27.9	20.03	6.20	2.00	8.5	-	27.4	0.8	-	-	-	-	-	-	4	Br. G.	3	6	8	4 NE	2 NE
-	-	B	-	-	-	27.9	20.82	6.35	2.01	9.0	-	24.4	0.2	-	-	-	-	-	-	4	Br. G.	3	6	8	4 NE	2 NE
10/3	1152	S	-	-	-	28.5	20.44	6.34	1.55	10.3	-	26.6	0.1	-	-	-	-	-	-	34.6	-	-	-	-	-	-
-	-	M	-	-	-	28.3	20.90	6.44	1.72	11.2	-	22.0	0.1	-	-	-	-	-	-	34.6	-	-	-	-	-	-
-	-	B	-	-	-	28.3	20.95	6.40	1.83	11.3	-	>29.0	1.3	-	-	-	-	-	-	34.6	-	-	-	-	-	-
11/19	1410	S	-	-	-	24.0	24.78	7.65	2.18	4.9	-	21.6	0.1	-	-	-	-	-	-	7.7	-	-	-	-	-	-
-	-	M	-	-	-	23.7	25.07	7.70	2.24	5.2	-	20.4	0.0	-	-	-	-	-	-	7.7	-	-	-	-	-	-
-	-	B	-	-	-	23.5	25.01	7.80	2.41	6.5	-	23.4	-	-	-	-	-	-	-	7.7	-	-	-	-	-	-
12/19	1537	S	-	-	-	13.6	26.69	8.21	2.30	2.5	-	20.3	0.2	-	-	-	-	-	-	46.4	-	-	-	-	-	-
-	-	M	-	-	-	13.7	26.73	8.32	2.31	4.1	-	21.5	0.2	-	-	-	-	-	-	46.4	-	-	-	-	-	-
-	-	B	-	-	-	13.7	26.73	8.30	2.32	2.9	-	21.8	0.2	-	-	-	-	-	-	46.4	-	-	-	-	-	-
1961	1414	S	-	-	-	14.3	27.54	8.42	2.34	3.9	-	22.9	0.2	-	-	-	-	-	-	50.0	-	-	-	-	-	-
-	-	M	-	-	-	14.3	27.56	8.60	2.34	4.2																

STATION 3 Depth of 38 feet Lat. 27°41.6' N. Long. 82°33.5' W.

Date	Time	Depth	Gymnodinium		°C	Sal	Ca	Alk	Si	Phosphorus		NO ₃	NH ₃	Org	In	Light	Transp	Color	CA	CT	VI	Amt	Dir	Amt	Dir	Sea	
			C	M						Im	Tot																
1960																											
1/13	1406	S	0	-	20.4	26.80	-	-	-	17.0	17.0	0.2	-	-	-	-	-	7	D.G.	2	-	-	2	WSW	0		
-	-	M	0	-	20.4	26.87	-	-	-	16.3	17.2	0.2	-	-	-	-	-	6	D.G.	6	1	-	1	NW	0		
2/16	1455	S	0	-	16.1	26.18	-	-	-	19.6	21.3	0.2	-	-	-	-	-	6	D.G.	6	1	-	1	NW	0		
-	-	M	0	-	16.1	26.20	-	-	-	20.3	20.8	0.3	-	-	-	-	-	6	Br.G.	2	6	-	4	SW	2		
3/29	1320	S	0	-	20.2	22.90	-	-	-	20.0	21.8	0.1	-	-	-	-	-	6	Br.G.	2	6	-	4	SW	2		
-	-	M	P	0.0	20.0	22.94	-	-	-	21.3	22.7	0.1	-	-	-	-	-	5	L.G.	6	8	7	4	E	1		
4/14	1348	S	0	-	21.1	25.28	7.44	2.22	0.6	-	16.2	0.1	7.1	-	-	-	-	5	L.G.	6	8	7	4	E	1		
-	-	M	0	-	21.0	25.46	7.35	2.3	-	16.3	0.1	7.1	-	-	-	-	-	5	L.G.	6	8	7	4	E	1		
-	-	B	0	-	20.8	25.73	7.56	2.24	1.2	-	16.4	0.1	7.1	-	-	-	-	7	D.G.	3	6	6	4	W	2		
5/10	1135	S	0	-	24.2	27.03	8.28	2.20	0.7	-	16.5	0.4	4.7	-	-	-	-	7	D.G.	3	6	6	4	W	2		
-	-	M	0	-	24.2	27.03	8.25	2.18	0.8	-	16.7	0.2	4.7	-	-	-	-	8	D.G.	7	6	7	1	N	0		
-	-	B	0	-	27.11	8.25	2.18	1.3	-	16.8	0.2	4.7	-	-	-	-	-	8	D.G.	7	6	7	1	N	0		
6/22	1058	S	0	-	28.4	28.86	8.76	2.19	2.5	-	17.0	0.1	-	-	-	-	-	8	D.G.	3	4,8	7	1	SW	1		
-	-	M	0	-	28.2	29.29	8.91	2.24	3.7	-	15.9	0.3	-	-	-	-	-	8	D.G.	3	4,8	7	1	SW	1		
-	-	B	0	-	28.2	29.29	8.91	2.20	4.0	-	16.0	0.1	-	-	-	-	-	8	D.G.	3	4,8	7	1	SW	1		
7/19	0914	S	0	-	30.5	29.27	9.04	2.28	4.7	-	16.9	0.0	3.5	-	-	-	-	8	R.Br.	3	3,4,8	6	3	N	2		
-	-	M	0	-	30.4	29.29	9.20	2.29	4.8	-	16.9	0.0	3.5	-	-	-	-	8	R.Br.	3	3,4,8	6	3	N	2		
-	-	H	0	-	30.8	29.74	9.16	2.27	5.7	-	14.3	0.0	3.5	-	-	-	-	8	R.Br.	3	3,4,8	6	3	N	2		
8/18	0925	S	0	-	29.6	23.15	7.12	2.10	3.2	-	24.5	0.1	7.1	-	-	-	-	6	Br.G.	3	8	8	4	NE	2		
-	-	M	0	-	29.9	26.18	8.12	2.19	9.7	-	18.0	0.2	7.1	-	-	-	-	7	Br.G.	1	8	6	4	NE	2		
-	-	B	0	-	30.0	26.96	8.35	2.21	10.7	-	17.7	0.2	7.1	-	-	-	-	6	Br.G.	2	1,2,3,8	7	0	-	1	NE	
9/20	1207	S	0	-	28.3	19.36	5.94	1.99	9.9	-	25.3	0.1	4.1	-	-	-	-	6	Br.G.	3	8	8	4	NE	2		
-	-	M	0	-	28.0	23.15	7.03	2.10	5.7	-	24.0	0.0	4.1	-	-	-	-	6	Br.G.	3	8	8	4	NE	2		
-	-	B	0	-	28.0	24.04	7.30	2.08	5.7	-	21.0	0.2	4.1	-	-	-	-	6	Br.G.	3	8	8	4	NE	2		
10/3	1132	S	0	-	28.8	21.98	6.72	1.65	10.4	-	26.5	0.3	7.1	-	-	-	-	6	Br.G.	3	8	8	4	NE	2		
-	-	M	0	-	28.8	23.06	7.00	1.80	7.8	-	23.7	0.1	7.1	-	-	-	-	6	Br.G.	3	8	8	4	NE	2		
-	-	B	0	-	28.8	23.24	7.10	1.80	8.4	-	24.8	0.1	7.1	-	-	-	-	6	Br.G.	3	8	8	4	NE	2		
11/19	1348	S	0	-	23.6	25.72	8.30	2.23	3.9	-	20.2	0.2	23.5	-	-	-	-	38.7	-	-	-	-	-	-	-		
-	-	M	0	-	23.5	25.77	8.06	2.21	4.7	-	19.2	0.1	23.5	-	-	-	-	38.7	-	-	-	-	-	-	-		
-	-	B	0	-	23.5	25.84	7.86	2.23	3.6	-	18.2	0.4	23.5	-	-	-	-	38.7	-	-	-	-	-	-	-		
12/19	1518	S	0	-	14.0	26.91	8.35	2.32	1.6	-	21.0	0.7	1.2	-	-	-	-	42.5	-	-	-	-	-	-	-		
-	-	M	0	-	13.8	27.27	8.50	2.34	1.8	-	19.5	0.2	1.2	-	-	-	-	42.5	-	-	-	-	-	-	-		
-	-	B	0	-	13.7	27.45	8.56	2.34	2.1	-	20.8	0.1	1.2	-	-	-	-	42.5	-	-	-	-	-	-	-		
1961	1/31	1355	S	0	14.5	27.81	8.44	2.30	2.9	-	21.5	0.1	-	19.0	0.4	42.1	-	D.G.	2	2,8	7	2	NW	1			
-	-	M	0	-	14.4	27.99	8.61	2.30	2.2	-	21.9	0.1	-	-	-	42.1	-	D.G.	2	2,8	7	2	NW	1			
-	-	B	0	-	14.4	28.13	8.63	2.34	4.5	-	23.6	0.4	-	-	-	42.1	-	D.G.	2	2,8	7	2	NW	1			
2/27	1237	S	0	-	19.9	27.59	8.66	2.21	3.4	-	29.0	0.2	-	20.3	0.1	47.7	5	D.G.	0	-</td							

STATION 4

Lat. 27° 41.3' N.

Long. 82° 32.9' W.

Date	Time	Depth	Gymnodinium			Depth of 16 feet			Lat. 27° 41.3' N.			Phosphorus			Water						
			C	M	breve	°C	Sal	Ca	Alk	Si	In	PO ₄	NO ₃	NH ₃	Org.	In	Light transm	Sky	Wind	Sea	
1960																					
1/13	1352	S	-	-	-	20.6	26.83	-	-	-	16.4	20.6	0.3	-	-	-	4	Br. G.	2	-	
-	-	M	-	-	-	20.7	26.83	-	-	-	16.6	17.5	0.1	-	-	-	-	-	-	0	
-	-	B	-	-	-	20.8	26.74	-	-	-	17.4	18.8	0.2	-	-	-	-	-	-	0	
2/16	1443	S	-	-	-	15.5	25.53	-	-	-	20.0	21.8	0.2	-	-	-	-	5½	Br. G.	4	1
-	-	M	-	-	-	15.5	25.48	-	-	-	20.6	24.2	0.7	-	-	-	-	-	-	1 NW	
-	-	B	-	-	-	15.5	25.48	-	-	-	20.3	24.2	0.4	-	-	-	-	-	-	0	
3/29	1311	S	-	-	-	20.3	22.36	-	-	-	21.8	23.5	0.2	-	-	-	-	4	Br. G.	3	6
-	-	M	-	-	-	20.2	22.36	-	-	-	21.3	22.3	0.2	-	-	-	-	6	L. G.	6	8
-	-	B	-	-	-	20.2	22.57	-	-	-	21.8	23.2	0.1	-	-	-	-	6	L. G.	6	8
4/14	1334	S	-	-	-	21.3	25.19	7.35	2.21	0.6	-	16.2	0.3	-	-	-	-	6	L. G.	6	8
-	-	M	-	-	-	21.2	25.23	7.45	2.24	0.8	-	16.9	0.0	-	-	-	-	6	L. G.	6	8
-	-	B	-	-	-	21.3	25.19	7.36	2.25	0.7	-	18.1	0.1	-	-	-	-	6	L. G.	6	8
5/10	1115	S	-	-	-	23.9	26.53	7.94	2.21	0.8	-	18.4	0.2	-	-	-	-	4	G.	3	8
-	-	M	-	-	-	24.0	26.51	8.15	2.26	1.0	-	19.4	0.2	-	-	-	-	4	G.	3	8
-	-	B	-	-	-	24.0	26.58	8.17	2.28	1.0	-	20.0	0.3	-	-	-	-	4	G.	3	8
6/22	1040	S	-	-	-	28.0	28.71	8.80	2.27	2.3	-	20.1	0.2	-	-	-	-	2½	G.	7	6.8
-	-	M	-	-	-	28.0	28.68	8.77	2.29	2.3	-	20.8	0.1	-	-	-	-	2½	G.	7	6.8
-	-	B	-	-	-	28.0	28.68	8.71	2.30	2.4	-	21.7	0.1	-	-	-	-	2½	G.	7	6.8
7/19	0856	S	-	-	-	30.4	29.20	9.03	2.23	7.2	-	17.2	0.1	-	-	-	-	8	D. G.	3	4.8
-	-	M	-	-	-	30.4	29.18	8.94	2.24	6.2	-	18.5	0.1	-	-	-	-	8	D. G.	3	4.8
-	-	B	-	-	-	30.4	29.18	8.94	2.31	6.4	-	15.0	0.0	-	-	-	-	8	D. G.	3	4.8
8/18	0910	S	-	-	-	29.7	23.40	7.06	2.10	3.3	-	21.4	0.1	-	-	-	-	6	Br. G.	1	8
-	-	M	-	-	-	29.6	24.99	7.70	2.23	8.1	-	20.2	0.1	-	-	-	-	6	Br. G.	1	8
-	-	B	-	-	-	30.2	25.19	7.94	2.25	8.7	-	21.9	0.1	-	-	-	-	6	Br. G.	1	8
9/20	1148	S	-	-	-	28.3	22.88	6.90	2.09	5.2	-	23.5	0.1	-	-	-	-	4½	R. Br. G.	3	3.4, 8
-	-	M	-	-	-	28.2	22.77	6.90	2.16	5.3	-	25.2	0.1	-	-	-	-	4½	R. Br. G.	3	3.4, 8
-	-	B	-	-	-	28.2	22.77	6.90	2.20	5.3	-	24.7	0.1	-	-	-	-	4½	R. Br. G.	3	3.4, 8
10/3	1117	S	-	-	-	28.8	22.41	6.94	1.72	5.9	-	23.1	0.2	-	-	-	-	3	Br. G.	3	8
-	-	M	-	-	-	28.7	22.45	6.83	1.80	5.9	-	28.3	0.1	-	-	-	-	3	Br. G.	3	8
-	-	B	-	-	-	28.7	22.50	6.93	1.93	6.1	-	27.8	0.1	-	-	-	-	3	Br. G.	3	8
11/19	1327	S	-	-	-	24.1	26.02	8.08	2.27	4.7	-	21.1	0.2	-	-	-	-	46.9	-	-	-
-	-	M	-	-	-	23.9	26.02	8.19	2.30	5.2	-	18.4	0.3	-	-	-	-	46.9	-	-	-
-	-	B	-	-	-	23.8	26.09	8.30	2.30	5.5	-	20.7	0.2	-	-	-	-	46.9	-	-	-
12/19	1500	S	-	-	-	13.4	26.87	8.28	2.34	2.5	-	22.4	0.2	-	-	-	-	21.7	-	-	-
-	-	M	-	-	-	13.4	26.96	8.31	2.32	2.7	-	22.1	0.1	-	-	-	-	21.7	-	-	-
-	-	B	-	-	-	13.4	27.01	8.40	2.36	2.9	-	22.4	0.3	-	-	-	-	21.7	-	-	-
1961	1345	S	-	-	-	14.6	27.25	8.54	2.28	4.0	-	23.9	0.1	-	-	-	-	45.9	-	-	-
-	-	M	-	-	-	14.4	27.25	8.47	2.30	4.0	-	24.3	0.3	-	-	-	-	45.9	-	-	-
-	-	B	-	-	-	14.4	27.32	8.40	2.29	4.2	-	24.2	0.2	-	-	-	-	45.9	-	-	-
2/27	1222	S	-	-	-	19.9	27.63	8.60	2.21	4.4	-	22.9	0.1	-	-	-	-	52.2	3	3	E
-	-	M	-	-	-	19.8	27.50	8.60	2.22	5.0	-	22.4	0.1	-	-	-	-	52.2	3	3	E
-	-	B	-	-	-	19.8	27.56	8.66	2.22	5.4	-	24.9	0.1	-	-	-	-	52.2	3	3	E
3/7	1448	S	-	-	-	23.0	29.45	9.15	2.32	2.0	-	23.0	0.0	-	-	-	-	42.9	5	1, 2, 8	7
-	-	M	-	-	-	23.0	29.42	9.00	2.34	1.7	-	23.2	0.0	-	-	-	-	42.9	5	1, 2, 8	7
-	-	B	-	-	-	23.0	29.31	9.14	2.32	1.4	-	22.0	0.2	-	-	-	-	42.9	5	1, 2, 8	7
5/10	1055	S	-	-	-	25.7	30.90	9.45	2.32	4.3	-	22.1</td									

STATION 5	Depth of 28 feet			Lat. 27°36.6' N.			Long. 82°43.8' W.			Water			Sky			Wind			Sea						
	Cyanodinurn		breve	°C	Sal	Ca	Alk	Si	In	PO ₄	NO ₃	NH ₃	Org	In	Light transm.	Transp	Color	CA	CT	Vi	Amt	Dir	Amt	Dir	
Date	Time	Depth	C	M				Tot	NO _{2-N}																
1960	1/25	1417	S	P	0.0	11.9	31.49	-	-	2.5	3.4	0.2	-	-	-	-	4½	M.G.	6	1	-	3	NNE	2	
-	-	M	0	-	11.8	31.49	-	-	2.4	2.8	0.1	-	-	-	-	-	4	L.G.	8	1	-	0	-	0	
-	-	B	P	0.0	11.7	31.56	-	-	1.7	2.4	0.1	-	-	-	-	-	4	L.G.	7	2	-	3	NE	2	
2/17	1532	S	P	53	15.8	31.69	-	-	4.2	4.7	0.2	-	-	-	-	-	4	L.G.	8	1	-	0	-	0	
-	-	M	P	15.4	15.7	32.14	-	-	2.9	3.6	0.2	-	-	-	-	-	4	L.G.	7	2	-	3	NE	2	
-	-	B	P	22	15.7	32.36	-	-	3.1	4.0	0.5	-	-	-	-	-	4	L.G.	7	2	-	3	NE	2	
3/28	1353	S	P	11	19.0	29.56	-	-	7.3	7.9	0.3	-	-	-	-	-	8	L.G.	7	2	-	3	NE	2	
-	-	M	P	2.4	18.7	30.72	-	-	4.4	5.4	0.5	-	-	-	-	-	8½	D.G.	7	3,4,6,8	7	2	SW	1	
-	-	B	P	3	18.7	31.15	-	-	4.4	5.4	0.5	-	-	-	-	-	7	L.G.	1	8	2	NW	1	SW	
4/26	1331	S	P	0.0	24.1	32.25	9.70	2.37	2.6	-	5.5	0.1	-	-	-	-	8½	D.G.	7	3,4,6,8	7	2	SW	1	
-	-	M	P	0.2	23.7	33.75	9.90	2.40	3.0	-	3.9	0.7	-	-	-	-	7	L.G.	1	8	2	NW	1	SW	
-	-	B	P	0.0	23.7	33.24	9.90	2.40	3.5	-	3.9	0.4	-	-	-	-	7	L.G.	1	8	2	NW	1	SW	
5/24	1223	S	P	0.0	28.2	33.17	10.00	2.42	1.4	-	3.9	0.1	-	-	-	-	8	L.G.	8	6,8	6	4	W	2	
-	-	M	O	-	27.0	33.49	10.17	2.41	3.3	-	2.7	0.1	-	-	-	-	8	L.G.	8	6,8	6	4	W	2	
-	-	B	P	0.0	26.8	33.49	10.17	2.37	3.8	-	3.0	0.1	-	-	-	-	8	L.G.	8	6,8	6	4	W	2	
6/21	1119	S	O	-	28.0	33.40	10.14	2.42	9.0	-	5.9	0.1	-	-	-	-	8	Bx.G.	6	8	7	4	W	2	
-	-	M	O	-	28.0	33.33	10.15	2.41	9.1	-	6.4	0.2	-	-	-	-	8	Bx.G.	6	8	7	4	W	2	
7/12	1534	S	O	-	31.0	33.91	10.34	2.44	3.8	-	5.9	0.2	-	-	-	-	5	Bx.G.	6	8	7	4	W	2	
-	-	M	O	-	30.9	34.05	10.34	2.44	6.2	-	5.0	0.2	-	-	-	-	5	Bx.G.	6	8	7	4	W	2	
8/9	1456	S	P	0.0	30.9	29.38	8.95	2.23	0.8	-	9.2	0.2	-	-	-	-	5½	Bx.G.	2	6,8	7	1	SW	0	
-	-	M	P	0.1	29.6	31.13	9.50	2.34	1.8	-	7.8	0.2	-	-	-	-	5½	Bx.G.	2	6,8	7	1	SW	0	
-	-	B	P	0.2	29.6	31.11	9.54	2.34	2.3	-	8.7	0.1	-	-	-	-	5½	Bx.G.	2	6,8	7	1	SW	0	
9/8	1535	S	P	0.1	28.8	30.43	9.10	2.26	4.8	-	7.2	0.1	-	-	-	-	7	D.G.	8	6,8	7	5	NE	2	
-	-	M	P	0.1	28.9	31.24	9.40	2.31	6.2	-	5.7	0.1	-	-	-	-	7	D.G.	8	6,8	7	5	NE	2	
-	-	B	P	0.0	28.9	31.27	9.50	2.31	6.4	-	5.8	0.1	-	-	-	-	7	D.G.	8	6,8	7	5	NE	2	
10/4	1318	S	P	0.0	28.3	29.29	8.36	1.99	2.0	-	11.5	0.2	-	-	-	-	6	D.G.	6	2,4,8	6	3	E	2	
-	-	M	O	-	28.2	30.17	9.15	2.11	2.2	-	10.1	0.6	-	-	-	-	6	D.G.	6	2,4,8	6	3	E	2	
-	-	B	O	-	28.2	30.97	9.40	2.34	3.4	-	9.3	0.5	-	-	-	-	6	D.G.	6	2,4,8	6	3	E	2	
11/17	1306	S	O	-	23.8	31.35	9.55	2.38	2.7	-	7.4	0.3	-	-	-	-	38.2	B	2,4,8	7	1	N	0		
-	-	M	O	-	23.3	31.94	9.84	2.42	5.9	-	7.1	0.9	-	-	-	-	38.2	B	2,4,8	7	1	N	0		
-	-	B	O	-	23.3	32.21	9.80	2.42	4.0	-	6.6	0.4	-	-	-	-	38.2	B	2,4,8	7	1	N	0		
12/27	1005	S	O	-	12.8	32.27	9.87	2.44	0.5	-	3.2	0.2	-	-	-	-	36.0	-	M.G.	7	2,6,8	6	4	NE	2
-	-	M	O	-	12.8	32.43	9.77	2.47	0.5	-	2.8	0.2	-	-	-	-	36.0	-	M.G.	7	2,6,8	6	4	NE	2
-	-	B	O	-	12.8	32.29	9.77	2.46	0.6	-	3.4	0.1	-	-	-	-	36.0	-	M.G.	7	2,6,8	6	4	NE	2
1961	1446	S	O	-	14.0	32.27	9.83	2.47	5.8	-	7.2	0.2	-	-	-	-	43.8	-	M.G.	0	-	7	4	NE	2
-	-	M	O	-	13.8	32.38	10.03	2.48	1.4	-	6.9	0.2	-	-	-	-	43.8	-	M.G.	0	-	7	4	NE	2
-	-	B	O	-	13.9	32.56	10.02	2.48	1.0	-	7.1	0.3	-	-	-	-	43.8	-	M.G.	0	-	7	4	NE	2
2/20	1706	S	P	0.0	18.4	32.61	10.02	2.39	2.1	-	5.7	0.3	-	-	-	-	6	G.	6	1,2,8	7	1	S	0	
-	-	M	P	0.0	18.4	32.97	10.12	2.40	2.9	-	4.7	0.4	-	-	-	-	6	G.	6	1,2,8	7	1	S	0	

STATION 7	Depth of 25 feet			Lat. 27°35.1' N.			Long. 82°43.5' W.			Wind			Water										
	Date	Time	Depth	Gymnodinium	breve	°C	Sal	Ca	Alk	Si	In	Light transm	Transp	Color	CA	CT	Vi	Amt Dir	Ant Dir	Sea			
T960			C	M						PO ₄	NO ₃	NH ₃	Org.	NO ₂ -N									
1/25	1400	S	P	2	12.6	31.46	-	-	-	1.6	2.1	0.3	-	-	-	5	M.G.	6	1	-	3 NNE		
-	-	M	P	0,3	12.6	31.40	-	-	-	1.6	2.3	0.1	-	-	-	3½	L.G.	8	1	-	0 NNE		
-	-	B	P	1	12.6	31.58	-	-	-	1.6	2.2	0.1	-	-	-	3½	L.G.	8	1	-	0		
2/17	1519	S	P	13	15.8	32.36	-	-	-	3.0	3.9	0.2	-	-	-	-	10½	L.G.	7	2	-	3 NE	
-	-	M	P	43	15.8	32.36	-	-	-	3.5	3.9	0.6	-	-	-	-	10½	L.G.	7	2	-	0 NE	
-	-	B	P	24,2	15.8	32.36	-	-	-	3.5	5.2	0.3	-	-	-	-	10½	L.G.	7	2	-	0 SSW	
3/28	1339	S	P	14	19.2	29.27	-	-	-	8.0	8.4	0.3	-	-	-	-	9	D.G.	6	-	7	2 SW 1 SSW	
-	-	M	P	8	18.9	30.44	-	-	-	5.3	5.7	0.3	-	-	-	-	10	L.G.	1	8	8	2 NW 1	
-	-	B	P	12	19.2	31.33	-	-	-	3.4	3.8	0.3	-	-	-	-	10	L.G.	1	8	8	2 SW	
4/26	1307	S	P	1	24.4	33.13	10.11	2.37	2.5	-	3.9	0.2	7.1	-	-	-	-	9½	L.G.	8	6,8	6	3 W 2 SW
-	-	M	P	1,2	24.0	33.24	10.03	2.38	2.5	-	3.4	0.0	-	-	-	-	9½	L.G.	8	6,8	6	3 W 2 SW	
5/24	1200	S	P	0,1	27.5	33.22	10.02	2.41	4.2	-	3.6	0.2	1.2	-	-	-	-	7	D.G.	6	8	7	4 W 2 W
-	-	M	P	0,1	27.1	33.33	10.13	2.38	5.0	-	3.3	0.3	-	-	-	-	7	D.G.	6	8	7	4 W 2 W	
6/21	1101	S	O	-	26.0	33.84	10.43	2.43	7.9	-	4.9	0.2	-	-	-	-	5	Br.G.	2	6,8	7	1 SW 0	
-	-	M	O	-	28.0	34.02	10.12	2.41	7.6	-	4.6	0.1	-	-	-	-	5	Br.G.	2	6,8	7	1 SW 0	
7/12	1517	S	O	-	28.0	34.27	10.40	2.44	7.1	-	3.6	0.2	-	-	-	-	7	D.G.	6	8	7	4 W 2 W	
-	-	M	O	-	31.0	34.11	10.30	2.42	7.9	-	4.6	0.2	-	-	-	-	7	D.G.	6	8	7	4 W 2 W	
-	-	B	O	-	31.0	34.18	10.42	2.40	5.7	-	4.5	0.2	-	-	-	-	7	D.G.	6	8	7	4 W 2 W	
8/9	1432	S	P	3	30.0	31.33	9.65	2.31	1.0	-	4.4	0.1	0.6	-	-	-	8	D.G.	8	6,8	7	4 E 2 NE	
-	-	M	P	2,2	29.3	31.42	9.49	2.33	1.1	-	4.9	0.1	-	-	-	-	8	D.G.	8	6,8	7	4 E 2 NE	
-	-	B	P	1,2	29.7	31.38	9.52	2.23	1.6	-	5.3	0.1	-	-	-	-	8	D.G.	8	6,8	7	4 E 2 NE	
9/8	1518	S	P	1	28.7	30.26	8.98	2.27	3.9	-	6.4	0.3	2.4	-	-	-	-	47.8	11	L.G.	6	2,4,8 7 0 -	0
-	-	M	P	0,3	28.8	30.64	9.08	2.26	4.3	-	5.8	0.2	-	-	-	-	47.8	11	L.G.	6	2,4,8 7 0 -	0	
-	-	B	P	0,1	28.8	30.70	9.11	2.29	4.8	-	5.5	0.1	-	-	-	-	47.8	11	L.G.	6	2,4,8 7 0 -	0	
10/4	1301	S	P	0,0	28.2	29.47	8.90	2.04	2.2	-	10.5	0.4	2.4	-	-	-	-	6½	D.G.	6	2,4,8 6 4 E 2 E	0	
-	-	M	P	0,0	28.3	30.43	9.35	2.08	2.5	-	8.3	0.1	-	-	-	-	6½	D.G.	6	2,4,8 6 4 E 2 E	0		
-	-	B	O	-	24.6	32.20	9.78	2.39	3.1	-	6.3	0.0	0.0	-	-	-	-	47.8	11	L.G.	6	2,4,8 7 0 -	0
-	-	M	O	-	24.5	32.20	9.84	2.38	3.3	-	6.4	0.0	-	-	-	-	47.8	11	L.G.	6	2,4,8 7 0 -	0	
-	-	B	O	-	24.5	32.29	9.84	2.36	3.0	-	6.3	0.4	-	-	-	-	47.8	11	L.G.	6	2,4,8 7 0 -	0	
12/27	0949	S	O	-	12.6	31.82	9.70	2.42	0.3	-	3.6	0.1	1.2	-	-	-	-	37.9	-	M.G.	7	2,6,8 6 4 NE 2 NE	0
-	-	M	O	-	12.6	32.21	9.80	2.44	0.5	-	3.1	0.2	-	-	-	-	37.9	-	M.G.	7	2,6,8 6 4 NE 2 NE	0	
-	-	B	O	-	12.7	32.27	9.84	2.45	0.6	-	3.0	0.3	-	-	-	-	37.9	-	M.G.	7	2,6,8 6 4 NE 2 NE	0	
1961																							
1/30	1430	S	O	-	14.3	32.30	10.00	2.45	4.4	-	7.7	0.1	-	26.9	0.0	44.1	-	M.G.	0	-	7 4 NE 2 NE	0	
-	-	M	O	-	14.2	32.34	9.80	2.44	4.4	-	7.9	0.2	-	-	-	1.4	-	G.	6	1,2,8 7 2 S 1 S	0		
-	-	B	O	-	14.2	32.38	9.94	2.48	5.9	-	8.3	0.2	-	-	-	0.2	-	G.	6	1,2,8 7 2 S 1 S	0		
2/20	1650	S	P	0,0	18.2	32.97	10.21	2.38	0.8	-	4.7	0.1	-	17.4	0.7	-	-	10	G.	6	1,2,8 7 2 S 1 S	0	
-	-	M	P	0,0	18.6	33.24	10.17	2.40	1.8	-	3.8	0.1	-	-	-	-	10	G.	6	1,2,8 7 2 S 1 S	0		
-	-	B	P	0,0	18.6	33.15	10.12	2.40	2.8	-	3.7	0.2	-	-	-	-	10	G.	6	1,2,8 7 2 S 1 S	0		
3/6	1514	S	P	0,0	22.3	33.87	10.36	2.47	1.4	-	3.9	0.3	0.0	-	-	-	-	9	G.	3	2,8 7 5 S 2 S	0	
-	-	M	P	0,0	22.3	33.86	10.40	2.47	1.9	-	3.8	0.4	-	-	-	-	9	G.	3	2,8 7 5 S 2 S	0		
-	-	B	O	-	22.2	33.86	10.30	2.47	1.8	-	4.0	0.6	-	-	-</								

STATION 8	Depth of 21 feet				Lat. 27° 34.4' N.				Long. 82° 43.4' W.				Sea										
	Gymnodinium		breve		°C		Sal		Ca		Alk		Si		Sea								
	C	M	N	M	M	B	B	B	M	M	B	B	M	B	Sky	Wind	Water						
1960 1/25	1347	S	-	-	12.8	31.55	-	-	-	3.0	3.5	0.2	-	-	7	M.G.	6	1	-	4	NNE	2	NNE
-	-	M	-	-	12.8	31.55	-	-	-	3.2	3.5	0.3	-	-	-	-	-	-	-	-	-	-	-
2/17	1506	S	-	-	15.8	32.97	-	-	-	2.6	2.8	0.3	-	-	-	-	-	-	-	-	-	-	-
-	-	M	-	-	15.9	33.06	-	-	-	2.1	2.5	0.4	-	-	-	-	-	-	-	-	-	-	-
3/28	1328	S	-	-	19.5	29.52	-	-	-	2.3	2.5	0.4	-	-	-	-	-	-	-	-	-	-	-
-	-	M	-	-	19.0	32.18	-	-	-	2.0	2.3	0.3	-	-	-	-	-	-	-	-	-	-	-
4/26	1249	S	-	-	25.2	33.03	10.03	2.38	2.2	-	3.7	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	M	-	-	24.0	34.09	10.38	2.41	2.7	-	2.1	0.1	-	-	-	-	-	-	-	-	-	-	-
5/24	1147	S	-	-	27.0	33.49	10.20	2.38	6.4	-	3.6	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	M	-	-	25.5	34.16	10.40	2.41	6.9	-	2.7	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	B	-	-	25.2	34.25	10.36	2.42	6.7	-	2.6	0.0	-	-	-	-	-	-	-	-	-	-	-
6/21	1046	S	-	-	27.9	34.94	10.70	2.44	5.2	-	1.8	0.3	-	-	-	-	-	-	-	-	-	-	-
-	-	M	-	-	27.9	34.88	10.70	2.42	5.5	-	2.1	0.2	-	-	-	-	-	-	-	-	-	-	-
-	-	B	-	-	27.9	34.90	10.60	2.44	5.4	-	2.5	0.2	-	-	-	-	-	-	-	-	-	-	-
7/12	1503	S	-	-	31.2	35.03	10.70	2.43	2.8	-	1.8	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	M	-	-	31.2	35.07	10.70	2.43	2.9	-	2.0	0.2	-	-	-	-	-	-	-	-	-	-	-
-	-	B	-	-	31.2	35.03	10.65	2.43	3.1	-	1.9	0.1	-	-	-	-	-	-	-	-	-	-	-
8/9	1417	S	-	-	29.8	30.10	9.11	2.27	1.3	-	7.0	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	M	-	-	29.7	31.91	9.64	2.32	1.1	-	3.1	0.0	-	-	-	-	-	-	-	-	-	-	-
-	-	B	-	-	29.8	32.27	9.78	2.34	1.2	-	2.9	0.2	-	-	-	-	-	-	-	-	-	-	-
9/8	1507	S	-	-	28.8	30.46	9.20	2.29	4.0	-	4.7	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	M	-	-	28.8	31.00	9.30	2.30	4.2	-	4.2	3.8	-	-	-	-	-	-	-	-	-	-	-
-	-	B	-	-	28.8	32.23	9.61	2.33	6.9	-	2.1	0.4	-	-	-	-	-	-	-	-	-	-	-
10/4	1259	S	-	-	28.1	29.87	9.00	1.99	1.8	-	9.1	0.4	-	-	-	-	-	-	-	-	-	-	-
-	-	M	-	-	28.2	30.79	9.25	2.07	2.0	-	7.1	0.2	-	-	-	-	-	-	-	-	-	-	-
-	-	B	-	-	28.4	32.90	9.81	2.16	2.8	-	2.3	0.6	-	-	-	-	-	-	-	-	-	-	-
11/17	1232	S	-	-	24.0	31.42	9.55	2.35	3.8	-	8.6	0.0	-	-	-	-	-	-	-	-	-	-	-
-	-	M	-	-	23.9	33.08	10.12	2.38	5.3	-	4.3	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	B	-	-	23.8	33.33	10.04	2.38	5.5	-	3.7	0.3	-	-	-	-	-	-	-	-	-	-	-
12/27	0937	S	-	-	12.8	32.14	9.65	2.42	0.4	-	4.1	0.2	-	-	-	-	-	-	-	-	-	-	-
-	-	M	-	-	12.8	32.18	9.83	2.41	0.4	-	4.4	0.3	-	-	-	-	-	-	-	-	-	-	-
-	-	B	-	-	12.8	32.18	9.85	2.39	0.6	-	3.8	0.2	-	-	-	-	-	-	-	-	-	-	-
1961 1/30	1415	S	-	-	14.5	32.12	9.95	2.42	2.6	-	8.2	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	M	-	-	14.4	32.30	9.74	2.42	2.8	-	7.8	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	B	-	-	14.4	32.59	9.99	2.43	2.9	-	6.7	0.1	-	-	-	-	-	-	-	-	-	-	-
2/20	1639	S	-	-	19.4	33.44	10.24	2.41	2.1	-	3.0	0.2	-	-	-	-	-	-	-	-	-	-	-
-	-	M	-	-	19.2	33.98	10.55	2.44	2.0	-	1.9	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	B	-	-	19.2	33.42	10.32	2.39	1.8	-	3.3	0.1	-	-	-	-	-	-	-	-	-	-	-
3/6	1503	S	-	-	22.6	34.29	10.40	2.46	3.2	-	2.4	0.5	-	-	-	-	-	-	-	-	-	-	-
-	-	M	-	-	22.6	34.31	10.48	2.46	3.9	-	1.7	0.5	-	-	-	-	-	-	-	-	-	-	-
5/9	1021	S	-	-	25.8	34.40	10.52	2.45	3.4	-	5.8	0.0	-	-	-	-	-	-	-	-	-	-	-
-	-	M	-	-	25.8	34.69	10.57	2.46	5.6	-	4.0	0.2	-	-	-	-	-	-	-	-	-	-	-
-	-	B	-	-	28.0	35.03	10.70	2.48	3.0	-	3.0	0.0	-	-	-	-	-	-	-	-	-	-	-
6/7	0916	S	-	-	28.0	35.03	10.70	2.48	3.0	-	3.7	0.2	-	-	-	-	-	-	-	-	-	-	-
-	-	D	-	-	30.4	35.88	11.00	2.49	1.7	-	3.9	0.5</td											

STATION 9 Depth of 16 feet Lat. 27°33.7' N. Long. 82°43.4' W.

Date	Time	Depth	Gymnodinium	breve	°C	Sal	Ca	Alk	Si	In	Phosphorus	NO ₃	NH ₃	Org	In	Light transm	Color	CA	GT	Vi	Amt	Dir	Sea
			C	M						In	PO ₄	Tot	NO ₂ -N	NO ₂ -N									
1960	1/25	1336	S	P	0.9	13.0	32.00	-	-	3.2	3.6	0.2	-	-	-	7	M, G.	6	1	-	4	NNW	2
-	-	M	P	0.1	13.0	32.00	-	-	-	3.3	3.7	0.1	-	-	-	3½	L, G.	7	1	-	0	0	0
-	-	B	P	0.3	13.0	32.01	-	-	-	3.1	3.8	0.1	-	-	-	-	-	-	-	-	-	-	-
2/17	1455	S	P	5.2	16.0	33.33	-	-	-	1.8	2.4	0.2	-	-	-	-	-	-	-	-	-	-	-
-	-	M	P	5	16.0	33.42	-	-	-	2.0	2.3	0.3	-	-	-	-	-	-	-	-	-	-	-
-	-	B	P	1.8	16.0	33.42	-	-	-	2.0	2.4	0.3	-	-	-	-	-	-	-	-	-	-	-
3/28	1317	S	P	11.2	19.7	30.59	-	-	-	4.3	4.6	0.3	-	-	-	-	-	-	-	-	-	-	-
-	-	M	P	7	24.1	34.05	10.28	2.42	1.9	-	1.4	1.8	0.2	-	-	-	-	-	-	-	-	-	-
-	-	B	P	6	19.2	32.52	-	-	-	1.5	1.7	0.2	-	-	-	-	-	-	-	-	-	-	-
4/26	1234	S	P	1.8	25.5	32.97	10.03	2.38	1.4	-	3.6	0.2	-	-	-	-	-	-	-	-	-	-	-
-	-	M	P	7	24.1	34.05	10.28	2.42	1.9	-	2.0	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	B	P	3	24.2	34.09	10.28	2.42	1.9	-	1.8	0.8	-	-	-	-	-	-	-	-	-	-	-
5/24	1132	S	P	0.0	26.4	33.75	10.42	2.40	6.9	-	3.5	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	M	P	-	25.5	34.02	10.30	2.37	7.3	-	3.0	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	H	P	-	25.5	34.07	10.34	2.38	7.5	-	3.0	0.1	-	-	-	-	-	-	-	-	-	-	-
6/21	1032	S	P	-	27.9	34.72	10.70	2.45	4.9	-	2.5	0.2	-	-	-	-	-	-	-	-	-	-	-
-	-	M	P	0	-	28.0	34.74	10.80	2.44	4.8	-	4.0	0.1	-	-	-	-	-	-	-	-	-	-
-	-	B	P	0	-	28.0	34.72	10.30	2.44	4.9	-	2.5	0.2	-	-	-	-	-	-	-	-	-	-
7/12	1449	S	P	0	-	31.0	35.03	10.56	2.43	2.1	-	1.7	0.2	-	-	-	-	-	-	-	-	-	-
-	-	M	P	0	-	31.0	35.10	10.61	2.38	3.0	-	1.6	0.0	-	-	-	-	-	-	-	-	-	-
-	-	B	P	0	-	31.0	35.10	10.68	2.44	3.6	-	1.8	0.1	-	-	-	-	-	-	-	-	-	-
8/9	1403	S	P	0.2	30.2	30.99	9.35	2.27	1.0	-	3.4	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	M	P	6	29.9	32.54	9.85	2.34	1.4	-	2.0	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	B	P	3.4	29.9	32.54	9.80	2.34	1.4	-	1.5	0.1	-	-	-	-	-	-	-	-	-	-	-
9/8	1453	S	P	0.4	28.8	29.45	8.75	2.26	2.5	-	5.5	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	M	P	0.0	28.9	30.64	9.28	2.29	4.3	-	4.0	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	B	P	0.0	29.0	33.01	9.99	2.26	3.6	-	5.2	0.1	-	-	-	-	-	-	-	-	-	-	-
10/4	1234	S	P	0.0	28.2	30.39	9.13	2.05	1.8	-	6.8	0.4	-	-	-	-	-	-	-	-	-	-	-
-	-	M	P	-	28.5	32.47	9.75	2.15	2.2	-	3.0	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	B	P	-	28.5	33.04	10.40	2.40	5.3	-	2.1	0.3	-	-	-	-	-	-	-	-	-	-	-
11/17	1216	S	P	-	24.2	31.85	9.80	2.36	3.7	-	7.4	0.3	-	-	-	-	-	-	-	-	-	-	-
-	-	M	P	0	-	24.2	33.96	10.36	2.40	5.3	-	2.3	0.4	-	-	-	-	-	-	-	-	-	-
-	-	B	P	0	-	24.9	34.04	10.40	2.40	5.3	-	2.2	1.6	-	-	-	-	-	-	-	-	-	-
12/27	0924	S	P	-	12.9	31.78	9.72	2.38	0.4	-	6.1	0.2	-	-	-	-	-	-	-	-	-	-	-
-	-	M	P	0	-	12.8	31.82	9.72	2.40	0.5	-	6.8	0.2	-	-	-	-	-	-	-	-	-	-
-	-	B	P	0	-	12.8	31.78	9.65	2.41	0.5	-	6.3	0.1	-	-	-	-	-	-	-	-	-	-
1961	1401	S	P	-	14.5	32.48	9.83	2.38	2.8	-	6.5	0.0	-	-	-	-	-	-	-	-	-	-	-
-	-	M	P	0	-	14.5	32.47	9.90	2.38	2.8	-	6.7	0.1	-	-	-	-	-	-	-	-	-	-
-	-	B	P	0	-	14.5	32.52	9.90	2.42	2.5	-	6.6	0.1	-	-	-	-	-	-	-	-	-	-
2/20	1624	S	P	0.0	19.4	34.04	10.50	2.43	2.2	-	1.8	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	M	P	0.0	19.4	33.95	10.61	2.44	1.8	-	1.9	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	B	P	0.1	19.4	33.95	10.36	2.45	2.9	-	1.6	0.1	-	-	-	-	-	-	-	-	-	-	-
3/6	1445	S	P	0.1	22.7	34.31	10.42	2.46	4.1	-	1.5	0.2	-	-	-	-	-	-	-	-	-	-	-
-	-	M	P	0.1	22.8	34.31	10.46	2.46	3.5	-	1.6	0.1	-	-	-	-	-	-	-	-	-	-	-
-	-	B	P	0.1	22.8	34.31	10.54	2.45	3.8	-	1.												

Date	Time	Depth	Depth of 15 feet			Lat. 27°33' N.			Long. 82°42.9' W.																	
			Gymnodinium breve	C M	°C	Sal.	Ca	Alk	Si	Phosphate PO ₄ In Tot	Nitrogen NO ₃ NH ₃ Org. NO ₂ -N	In Light transm	Water Transp Color	CA CT VI	SKY CT	Wind Dir	Amt	Sea Dir								
1960	1/25	1326	S	M	12.5	31.35	-	-	-	4.8	5.3	0.2	-	-	7½	M.G.	6	1	-	4	NNE	2				
-	-	M	B	12.6	31.38	-	-	-	4.7	5.6	0.4	-	-	5	L.G.	7	1	-	0	-	0					
2/17	1444	S	M	15.8	32.27	-	-	-	2.9	3.2	0.3	-	-	-	5	L.G.	7	1	-	0	-	0				
-	-	M	B	15.9	32.81	-	-	-	2.2	2.6	0.3	-	-	-	5	L.G.	7	2	-	2	SE	0				
3/28	1306	S	M	19.8	30.43	-	-	-	4.8	5.1	0.2	-	-	-	9½	L.G.	7	2	-	2	SE	0				
-	-	B	19.7	32.34	-	-	-	1.5	1.9	0.2	-	-	-	11	L.G.	6	3,4,8	7	2	SW	1					
4/26	1219	S	M	25.1	32.41	9.98	2.37	1.6	-	4.6	0.2	1.8	-	-	-	10½	L.G.	1	8	9	1	WNW	1			
-	-	B	24.0	33.51	10.11	2.41	1.6	-	2.9	0.1	-	-	-	-	-	11	L.G.	6	3,4,8	7	2	SW	1			
5/24	1118	S	M	25.6	32.95	10.22	2.40	7.1	-	5.0	0.0	-	-	-	-	-	9	L.G.	8	6,8	6	4	WSW	2		
-	-	B	25.5	34.02	10.31	2.42	2.3	-	1.7	0.4	-	-	-	-	-	-	9	L.G.	8	6,8	6	4	WSW	2		
6/21	1014	S	M	27.4	32.79	9.41	2.37	7.3	-	5.4	1.8	-	-	-	-	-	9	L.G.	8	6,8	6	4	WSW	2		
-	-	B	28.1	34.22	10.70	2.43	5.8	-	4.7	0.3	-	-	-	-	-	-	9	L.G.	8	6,8	6	4	WSW	2		
7/12	1434	S	M	28.0	34.88	10.50	2.43	5.8	-	4.3	0.2	-	-	-	-	-	7	D.G.	6	8	7	4	W	2		
-	-	B	29.9	34.92	10.47	2.41	2.6	-	2.2	0.1	-	-	-	-	-	-	6	Br.G.	2	8	7	1	SW	0		
8/9	1348	S	M	30.2	30.73	9.20	2.30	0.9	-	4.3	0.1	6.5	-	-	-	-	7	Br.G.	8	6,8	7	5	E	2		
-	-	B	30.0	31.29	9.33	2.33	1.5	-	3.6	0.1	-	-	-	-	-	-	10	D.G.	6	2,3,4,8	6	4	E	2		
9/8	1438	S	M	29.9	34.88	10.50	2.41	2.4	-	2.2	0.1	4.7	-	-	-	-	-	7	D.G.	6	8	7	1	NE	2	
-	-	B	29.0	32.29	9.78	2.34	6.7	-	2.2	0.1	-	-	-	-	-	-	6	Br.G.	2	8	7	1	SW	0		
10/4	1222	S	M	28.5	29.38	8.64	2.26	3.5	-	6.0	0.2	4.1	-	-	-	-	-	10	D.G.	6	2,3,4,8	6	4	E	2	
-	-	B	28.2	33.12	9.97	2.16	2.4	-	2.1	0.1	-	-	-	-	-	-	11	L.G.	5	1,2,8	7	1	N	1		
11/17	1200	S	M	27.9	28.80	8.70	2.07	1.0	-	9.8	0.1	1.8	-	-	-	-	-	43.3	11	1,2,8	7	1	N	1		
-	-	B	28.0	32.16	9.64	2.13	1.8	-	3.3	0.4	-	-	-	-	-	-	23.8	11	1,2,8	7	1	N	1			
12/27	0912	S	M	23.9	31.38	9.70	2.40	3.4	-	8.2	0.1	1.8	-	-	-	-	-	50.0	-	G.	7	2,6,8	6	4	NE	2
-	-	B	23.8	33.98	10.42	2.43	5.4	-	2.3	0.5	-	-	-	-	-	-	28.6	-	G.	7	2,6,8	6	4	NE	2	
1961	1347	S	M	12.3	30.39	9.36	2.39	0.3	-	11.9	0.1	0.0	-	-	-	-	-	57.9	-	M.G.	0	-	7	4	NE	2
1/30	-	M	B	13.0	30.68	9.40	2.38	0.3	-	11.1	0.1	0.0	-	-	-	-	-	20.4	-	M.G.	0	-	7	4	NE	2
-	-	B	13.1	32.30	9.93	2.43	0.8	-	5.9	0.1	0.0	-	-	-	-	-	7.2	-	M.G.	6	1,2,8	7	3	S	1	
2/20	1611	S	M	14.5	32.00	9.75	2.37	2.3	-	7.3	0.2	20.4	-	-	-	-	-	8	M.G.	6	1,2,8	7	3	S	1	
-	-	B	14.4	32.03	9.80	2.38	2.8	-	7.3	0.1	20.4	-	-	-	-	-	8	M.G.	6	1,2,8	7	3	S	1		
-	-	B	19.8	33.33	10.40	2.42	1.0	-	7.6	0.1	20.4	-	-	-	-	-	8	M.G.	6	1,2,8	7	3	S	1		
3/6	1437	S	M	23.3	34.14	10.52	2.46	2.1	-	2.7	0.1	14.7	0.9	-	-	-	-	9	G.	3	2,8	7	5	S	2	
-	-	B	23.1	34.20	10.42	2.46	2.7	-	2.5	0.1	14.7	2.9	-	-	-	-	9	G.	3	2,8	7	5	S	2		
5/9	0952	S	M	25.6	34.79	10.53	2.48	5.5	-	3.5	0.1	17.9	2.0	-	-	-	-	11	G.	2	1,6,8	7	4	S	1	
-	-	B	25.7	35.91	10.25	2.46	7.5	-	3.7	0.6	21.0	-	-	-	-	-	11	D.G.	2	1,2,3	8	3	SE	0		
6/7	0848	S	M	27.8	34.87	10.67	2.48	2.3	-	4.3	0.1	41.7	5.7	-	-	-	-	11	D.G.	2	1,6,8	7	4	S	1	
-	-	B	27.7	34.90	10.68	2.48	2.8	-	4.6	0.3	22.7	-	-	-	-	-	12.5	-	D.G.	2	1,2,3	8	3	SE	0	
7/12	1204	S	M	30.4	35.79	11.00	2.49	3.4	-	2.2	1.2	20.1	1.3	-	-	-	-	10	L.G.	3	1,2,8	7	4	SE	2	
-	-	B	30.2	35.79	10.95	2.48	2.6	-	1.8	0.8	16.1	-	-	-	-	-	12.5	-	L.G.	3	1,2,8	7	4	SE	2	
-	-	B	30.3	35.79	11.00	2.48	2.5	-	2.1	1.4	1.4	-	-	-	-	-	6.2	-	-	-	-	-	-			

STATION 12

Lat. 27°32.7' N.

Depth of 15 feet

Long. 82°43.7' W.

Cymnodinium

Phosphorus

Nitrogen

C

PO₄

breve

NO₃

°C

NH₃

Sal.

Org

Ca

In

Alk

Tot

Si

NO₂-N

transm

In

Water

transp

Color

CA

Sky

CT

Vi

CT

Wind

Dir

Amt

Dir

Sea

transm

M.G.

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STATION A	Date	Time	Depth	Gymnodinium			Lat. 27°36.4' N.			Long. 82°45.8' W.			Water			Sky			Wind			Sea						
				C	Breve	M	°C	Sal	Ca	Alk	Si	In	Phosphorus	Nitrogen	NO ₃	NO ₂ -N	Org	In	Light	Transp	Color	CA	CT	VI	Amt	Dir	Amt	Dir
T960	1/25	1431	S	P	14	12.7	31.47	-	-	-	-	0.8	1.4	0.3	-	-	-	6	M.G.	6	1	-	2	NNE	2	NNE		
-	-	M	P	7	12.7	31.58	-	-	-	-	1.0	1.6	0.2	-	-	-	5	L.G.	8	1	-	0	-	0	-	-		
-	-	B	P	7	12.9	31.60	-	-	-	-	0.9	1.8	0.1	-	-	-	5	L.G.	8	1	-	0	-	0	-	-		
2/17	1548	S	P	92	15.8	32.63	-	-	-	-	2.1	2.4	0.3	-	-	-	5	L.G.	8	1	-	0	-	0	-	-		
-	-	M	P	18.8	15.8	32.75	-	-	-	-	2.3	2.5	0.2	-	-	-	5	L.G.	8	1	-	0	-	0	-	-		
-	-	B	P	7.6	15.9	33.06	-	-	-	-	2.4	3.4	0.6	-	-	-	5	L.G.	8	1	-	0	-	0	-	-		
3/24	1501	S	P	80	17.3	30.32	-	-	-	-	5.3	5.8	0.2	-	-	-	12	L.G.	1	-	-	-	2	SW	2	-		
-	-	M	P	9.6	16.6	30.64	-	-	-	-	1.7	2.4	0.1	-	-	-	12	L.G.	1	-	-	-	-	-	-	-		
-	-	E	P	14	16.4	31.56	-	-	-	-	1.6	2.5	0.4	-	-	-	12	L.G.	1	-	-	-	-	-	-	-		
4/25	1346	S	P	0.8	24.4	32.68	9.95	2.37	1.7	-	4.3	0.2	-	-	-	-	13	L.G.	2	8	8	1	W	2	E	-		
-	-	M	P	0.6	23.4	33.35	10.15	2.38	2.3	-	3.0	0.0	-	-	-	-	13	L.G.	2	8	8	1	W	2	E	-		
-	-	B	P	0.0	23.1	33.73	10.05	2.40	2.7	-	2.7	0.2	-	-	-	-	13	L.G.	2	8	8	1	W	2	E	-		
5/19	1044	S	P	0	-	25.3	32.23	9.80	2.36	5.7	-	0.3	-	-	-	-	9½	M.G.	5	1,8	7	0	-	0	-	-		
-	-	M	P	0.0	24.6	33.40	10.20	2.36	6.5	-	3.3	0.2	-	-	-	-	9½	M.G.	5	1,8	7	0	-	0	-	-		
-	-	B	P	0	-	24.2	33.68	10.30	2.40	8.3	-	3.4	0.4	-	-	-	-	9½	M.G.	5	1,8	7	0	-	0	-	-	
6/20	1140	S	P	0	-	27.9	33.75	10.60	2.41	8.2	-	4.9	0.4	-	-	-	-	9	L.G.	7	2,4,8	7	2	S	1	SW	-	
-	-	M	P	0	-	27.8	34.02	10.65	2.42	8.7	-	4.0	0.1	-	-	-	-	9	L.G.	7	2,4,8	7	2	S	1	SW	-	
-	-	H	P	0	-	27.8	34.29	10.44	2.43	8.5	-	3.4	0.2	-	-	-	-	9	L.G.	7	2,4,8	7	2	S	1	SW	-	
7/11	1524	S	P	0	-	31.6	34.18	10.50	2.43	5.2	-	5.1	0.1	-	-	-	-	7	G.	6	5,8	7	4	WSSW	3	SW	-	
-	-	M	P	0	-	31.3	34.33	10.38	2.43	9.2	-	4.3	0.2	-	-	-	-	7	G.	6	5,8	7	4	WSSW	3	SW	-	
-	-	B	P	0	-	31.0	34.49	10.53	2.44	9.7	-	4.0	0.2	-	-	-	-	7	G.	6	5,8	7	4	WSSW	3	SW	-	
8/8	1546	S	P	2.4	29.4	30.41	9.05	2.27	0.8	-	6.1	0.0	-	-	-	-	13	D.G.	4	4	7	2	SW	1	SW	-		
-	-	M	P	4.0	29.2	31.91	9.60	2.30	1.9	-	5.1	0.1	-	-	-	-	13	D.G.	4	4	7	2	SW	1	SW	-		
-	-	B	P	10.0	29.2	31.35	9.37	2.29	1.8	-	4.9	0.1	-	-	-	-	13	D.G.	4	4	7	2	SW	1	SW	-		
9/7	1546	S	P	0.1	29.3	30.79	9.25	2.25	4.8	-	5.3	0.1	-	-	-	-	10	D.G.	5	0,8,9	7	2	E	2	E	-		
-	-	M	P	0.0	28.0	31.92	9.64	2.28	8.7	-	4.4	0.1	-	-	-	-	10	D.G.	5	0,8,9	7	2	E	2	E	-		
-	-	B	P	0.0	28.0	32.16	9.81	2.30	10.3	-	4.0	0.4	-	-	-	-	10	D.G.	5	0,8,9	7	2	E	2	E	-		
10/5	1457	S	P	0	-	28.4	29.49	8.88	2.00	2.0	-	10.2	0.1	-	-	-	-	8	D.G.	4	1,2,8	8	3	SE	2	SE	-	
-	-	M	P	0.0	-	23.4	32.03	9.59	2.14	2.6	-	6.0	0.2	-	-	-	-	8	D.G.	4	1,2,8	8	3	SE	2	SE	-	
-	-	B	P	0	-	23.4	32.29	9.88	2.19	3.8	-	4.9	0.3	-	-	-	-	8	D.G.	4	1,2,8	8	3	SE	2	SE	-	
11/17	1326	S	P	0	-	24.0	32.16	9.67	2.37	3.2	-	6.7	0.1	-	-	-	-	50.0	9	G.	5	1,4,8	7	0	-	0	-	-
-	-	M	P	0	-	23.4	32.72	10.00	2.40	3.3	-	4.5	0.2	-	-	-	-	50.0	9	G.	5	1,4,8	7	0	-	0	-	-
-	-	B	P	0	-	23.4	32.68	9.95	2.39	3.0	-	3.7	1.0	-	-	-	-	50.0	9	G.	5	1,4,8	7	0	-	0	-	-
12/20	1725	S	P	0	-	13.8	32.43	9.85	2.47	2.3	-	1.9	0.2	-	-	-	-	26.8	-	M.G.	6	2,3,4,8	6	0	-	1	-	-
-	-	M	P	0	-	14.0	32.56	9.95	2.46	2.0	-	2.2	0.5	-	-	-	-	26.8	-	M.G.	6	2,3,4,8	6	0	-	1	-	-
-	-	B	P	0	-	14.2	32.39	9.85	2.45	2.4	-	2.1	0.1	-	-	-	-	26.8	-	M.G.	6	2,3,4,8	6	0	-	1	-	-
1961	1/29	1508	S	0	-	14.5	32.90	10.03	2.41	3.0	-	5.3	0.1	-	-	-	-	5	M.G.	8	9	5	4	NW	1	N	-	
-	-</td																											

STATION 13 Depth of 22 feet Lat. 27° 38.2' N. Long. 82° 49.4' W.

Date	Time	Depth	Gymnodinium			Sal	Ca	Alk	Si	Phosphorus			Nitrogen	Water	Wind	Sea								
			C	Breve	M					In	Po ₄	NH ₃	NO ₃	Org	In	Light transm	Transp Color	CA	CT	Vi	Amt Dir	Amt Dir		
1960										-	-	-	-	-	-	10	M.G.	2	1	-	0	-		
1/12	1443	S	P	0.0	21.1	31.91	-	-	-	3.7	4.5	0.0	-	-	-	-	4½	M.G.	6	1	-	4	N	
-	-	M	0	-	19.6	33.10	-	-	-	1.8	2.6	0.1	-	-	-	-	10	L.G.	1	-	-	1	S	
-	-	B	0	-	19.6	33.26	-	-	-	1.6	2.0	0.2	-	-	-	-	10	L.G.	1	-	-	4	N	
2/23	1421	S	P	140	15.2	32.66	-	-	-	1.2	1.8	0.1	-	-	-	-	10	L.G.	1	-	-	4	N	
-	-	M	P	40	15.1	32.79	-	-	-	1.2	1.5	0.2	-	-	-	-	10	L.G.	1	-	-	4	N	
-	-	B	P	18	15.0	33.08	-	-	-	1.1	1.6	0.2	-	-	-	-	10	L.G.	1	-	-	4	N	
3/24	1305	S	P	240	18.6	28.84	-	-	-	0.4	0.6	0.1	-	-	-	-	10	L.G.	2	8	8	1	W	
-	-	M	P	13.2	16.3	32.52	-	-	-	0.7	0.7	0.1	-	-	-	-	10	L.G.	2	8	8	1	W	
-	-	B	P	4	16.0	32.81	-	-	-	0.6	0.9	0.1	-	-	-	-	10	L.G.	2	8	8	1	W	
4/25	1318	S	P	0.0	24.9	33.48	10.06	2.35	1.8	-	2.8	0.1	-	-	-	-	10	L.G.	2	8	8	1	E	
-	-	M	P	0.1	23.0	33.68	10.11	2.37	1.9	-	2.5	0.1	-	-	-	-	10	L.G.	2	8	8	1	E	
-	-	B	P	0.0	22.7	34.09	10.32	2.41	3.5	-	1.9	0.1	-	-	-	-	10	L.G.	2	8	8	1	E	
5/19	1017	S	P	0.1	25.6	33.42	10.11	2.39	5.4	-	3.0	0.2	-	-	-	-	10	L.G.	4	1,8	6	0	-	
-	-	M	P	-	25.0	33.42	10.20	2.41	2.5	-	2.0	0.4	-	-	-	-	10	L.G.	4	1,8	6	0	-	
-	-	B	O	-	24.6	34.13	10.40	2.40	3.8	-	1.7	0.2	-	-	-	-	10	L.G.	4	1,8	6	0	-	
6/20	1115	S	O	-	27.9	33.87	10.28	2.41	9.3	-	4.2	0.4	-	-	-	-	10	L.G.	7	2,4,8	7	2	S	
-	-	M	P	0	-	27.8	33.93	10.35	2.41	9.4	-	4.3	0.2	-	-	-	-	10	L.G.	7	2,4,8	7	2	S
-	-	B	P	0	-	27.7	34.04	10.54	2.42	11.2	-	4.1	0.1	-	-	-	-	10	L.G.	7	2,4,8	7	2	S
7/11	1501	S	P	0.2	31.2	34.45	10.44	2.42	9.3	-	3.7	0.1	-	-	-	-	10	L.G.	6	5,8	7	4	WSW	
-	-	M	P	0.0	31.1	34.42	10.60	2.42	10.1	-	3.8	0.2	-	-	-	-	10	L.G.	6	5,8	7	4	WSW	
-	-	B	P	0.0	30.9	34.45	10.47	2.42	9.3	-	3.8	0.5	-	-	-	-	10	L.G.	6	5,8	7	4	WSW	
8/8	1448	S	P	1	30.0	32.97	10.03	2.34	1.8	-	1.7	0.1	-	-	-	-	10	L.G.	3	8,9	7	2	SW	
-	-	M	P	0.3	29.2	32.92	10.03	2.34	0.7	-	1.5	0.0	-	-	-	-	10	L.G.	3	8,9	7	2	SW	
-	-	B	P	0.5	29.1	32.90	9.95	2.34	0.8	-	2.0	0.1	-	-	-	-	10	L.G.	3	8,9	7	2	SW	
9/7	1521	S	P	0.8	29.4	31.60	9.55	2.26	6.3	-	4.6	0.3	-	-	-	-	10	L.G.	5	0,8,9	7	2	E	
-	-	M	P	0.1	29.2	32.66	9.65	2.34	11.9	-	3.1	0.1	-	-	-	-	10	L.G.	5	0,8,9	7	2	E	
-	-	B	O	-	29.2	32.74	9.87	2.34	14.5	-	3.1	0.2	-	-	-	-	10	L.G.	5	0,8,9	7	2	E	
10/5	1431	S	P	0.0	28.7	31.04	9.34	2.22	2.0	-	7.6	0.3	-	-	-	-	10	L.G.	4	1,2,8	7	3	SE	
-	-	M	P	-	22.7	33.57	10.15	2.39	1.6	-	1.2	0.4	-	-	-	-	10	L.G.	4	1,2,8	7	3	SE	
-	-	B	O	-	22.8	32.50	9.84	2.34	3.7	-	4.4	0.1	-	-	-	-	10	L.G.	4	1,2,8	7	3	SE	
11/15	2310	S	O	-	23.0	33.57	10.15	2.39	1.6	-	7.6	0.3	-	-	-	-	10	L.G.	4	1,2,8	7	3	SE	
-	-	M	P	-	22.7	33.57	10.05	2.40	1.5	-	1.0	0.3	-	-	-	-	10	L.G.	4	1,2,8	7	3	SE	
-	-	B	O	-	22.8	33.60	10.15	2.38	1.5	-	1.0	0.2	-	-	-	-	10	L.G.	4	1,2,8	7	3	SE	
12/20	1700	S	O	-	24.6	32.47	10.01	2.44	2.1	-	1.2	0.6	-	-	-	-	10	L.G.	4	1,2,8	7	3	SE	
-	-	M	P	-	13.9	32.43	9.87	2.46	2.3	-	1.3	0.4	-	-	-	-	10	L.G.	4	1,2,8	7	3	SE	
-	-	B	O	-	14.0	32.65	9.90	2.47	2.0	-	1.5	0.2	-	-	-	-	10	L.G.	4	1,2,8	7	3	SE	
1961					-	14.5	33.37	10.19	2.46	3.8	-	3.8	0.1	-	-	-	5	M.G.	8	9	5	4	N	
-	-	M	O	-	14.4	33.44	10.20	2.49	7.4	-	3.8	0.2	-	-	-	-	5	M.G.	8	9	5	4	N	
-	-	B	P	-	14.3	33.89	10.30	2.48	5.8	-	2.8	0.2	-	-	-	-	5	M.G.	8	9	5	4	N	
2/21	1807	S	P	0.0	19.4	33.98	10.34	2.39	1.3	-	1.8	0.2	-	-	-	-	10½	D.G.	6	1,2,8	6	1	SSW	
-	-	M	P	0.2	18.3	33.87	10.40	2.38	2.5	-	2.0	0.2	-	-	-	-	10½	D.G.	6	1,2,8	6	1	SSW	
-	-	B	P</td																					

STATION 14	Depth of 22 feet			Lat. 27° 37.7' N.			Long. 82° 50' W.			Wind			
	Gymnodinium			Sal.			Phosphorus			Nitrogen			
	Breve	C	M	°C	°C	Alk.	Si	In	PO ₄	NO ₃	NH ₃	Org.	
1960													
1/12	1431	S	P	0.0	21.0	31.87	-	-	3.8	4.5	0.3	-	
-	-	M	P	"	19.4	33.37	-	-	1.3	2.0	0.1	-	
-	-	B	P	0	19.5	33.40	-	-	1.5	1.8	0.1	-	
2/23	1406	S	P	50	15.2	32.43	-	-	1.9	2.2	0.1	-	
-	-	M	P	20	15.0	32.97	-	-	1.0	1.4	0.2	-	
-	-	B	P	13	15.0	33.19	-	-	1.1	1.5	0.1	-	
3/24	1318	S	P	30	18.7	29.07	-	-	2.8	3.9	0.1	-	
-	-	M	P	12	16.0	32.56	-	-	0.4	1.0	0.2	-	
-	-	B	P	18	16.0	32.92	-	-	0.8	1.6	0.3	-	
4/25	1302	S	P	2	23.8	33.48	10.16	2.39	1.9	-	2.7	0.0	
-	-	M	P	0.6	22.7	34.13	10.25	2.42	3.0	-	1.7	0.0	
-	-	B	P	0.2	22.8	34.18	10.40	2.40	3.3	-	1.7	0.1	
5/19	1006	S	P	0.0	25.1	33.26	10.06	2.40	5.5	-	3.4	0.2	
-	-	M	P	"	24.8	33.96	10.24	2.40	3.1	-	1.7	0.3	
-	-	B	P	0	-	24.4	34.14	10.24	2.40	4.1	-	1.7	0.2
6/20	1106	S	P	0	27.7	34.38	10.44	2.43	9.1	-	3.0	0.3	
-	-	M	P	"	27.7	34.38	10.46	2.42	9.1	-	3.0	0.2	
-	-	B	P	0	-	27.7	34.38	10.25	2.42	10.5	-	3.0	0.3
7/11	1448	S	P	0.1	31.3	34.42	10.50	2.41	10.1	-	3.8	0.1	
-	-	M	P	0.0	31.2	34.42	10.44	2.42	13.5	-	3.8	0.3	
-	-	B	P	0.0	31.0	34.45	10.58	2.42	9.3	-	4.0	0.4	
8/8	1430	S	P	1	30.0	33.24	10.15	2.33	1.3	-	1.4	0.1	
-	-	M	P	5	29.3	33.26	10.03	2.37	1.1	-	1.2	0.1	
-	-	B	P	0.6	29.2	33.26	10.12	2.36	1.3	-	1.8	0.1	
9/7	1506	S	P	0.9	29.5	32.07	9.70	2.26	6.8	-	3.2	0.1	
-	-	M	P	0.3	29.2	32.86	9.96	2.31	10.4	-	1.9	0.2	
-	-	B	P	0	-	29.2	32.94	9.95	2.32	13.0	-	2.0	0.2
10/5	1417	S	P	0	28.5	31.49	9.54	2.30	1.6	-	6.4	1.1	
-	-	M	P	"	28.2	32.90	9.78	2.37	3.6	-	3.0	0.1	
-	-	B	P	0	-	28.3	33.17	9.98	2.37	5.9	-	3.4	0.2
11/15	2254	S	P	0	-	23.0	33.69	10.02	2.39	1.8	-	1.1	0.1
-	-	M	P	0	-	22.7	33.60	10.10	2.37	1.5	-	1.1	0.1
-	-	B	P	0	-	22.8	33.64	10.10	2.37	1.7	-	0.9	0.3
12/20	1647	S	P	0	-	14.3	32.32	9.92	2.44	1.8	-	1.3	0.2
-	-	M	P	0	-	13.7	32.57	9.82	2.47	2.0	-	2.4	0.3
-	-	B	P	0	-	13.5	32.57	10.01	2.48	2.8	-	3.0	0.3
1961	1423	S	P	0	-	14.3	33.57	10.15	2.45	2.8	-	3.3	0.2
-	-	M	P	0	-	14.4	33.91	10.32	2.45	3.7	-	1.7	0.1
1/29	1429	S	P	0	-	14.4	33.31	10.20	2.44	3.4	-	1.1	0.1
-	-	M	P	0	-	14.3	33.57	10.15	2.45	2.8	-	1.2	0.2
-	-	B	P	0	-	14.4	33.91	10.40	2.38	2.1	-	1.3	0.1
2/21	1749	S	P	0.0	18.9	34.00	10.55	2.39	1.4	-	1.1	0.5	
-	-	M	P	0.3	18.9	34.00	10.47	2.39	2.6	-	1.1	0.5	
-	-	B	P	0.3	18.9	33.98	10.40	2.45	3.6	-	1.3	0.2	
3/5	1509	S	P	0.0	22.2	34.47	10.55	2.45	3.4	-	1.3	0.0	
-	-	M	P	2.0	21.5	34.40	10.45	2.46	3.3	-	1.5	0.5	
-	-	B	P	1.2	21.4	34.47	10.50	2.45	3.6	-	1.3	0.2	
5/16	1406	S	P	1.0	26.5	34.81	10.71	2.48	1.9	-	2.1	0.0	
-	-	M	P	25.9	34.81	10.70	2.46	2.9	-	2.2	0.0		
-	-	B	P	25.6	34.88	10.75	2.46	1.7	-	2.3	0.2		
6/6	0925	S	P	0	-	27.5	34.87	10.64	2.48	4.7	-	1.1	-
-	-	M	P	0	-	27.4	34.90	10.64	2.47	6.1	-	2.9	0.6
-	-	B	P	0	-	27.5	34.83	10.67	2.48	3.9	-	3.0	0.3
7/11	1220	S	P	0	-	30.7	35.62	10.94	2.48	1.5	-	3.4	0.6
-	-	M	P	30.4	35.62	10.80	2.48	1.3	-	3.3	0.4		
-	-	B	P	30.4	35.62	10.86	2.48	2.2	-	3.5	0.1		

STATION 14	Depth of 22 feet			Lat. 27° 37.7' N.			Long. 82° 50' W.			Wind		
	Gymnodinium			Sal.			Phosphorus			Nitrogen		
	Breve	C	M	°C	°C	Alk.	Si	In	PO ₄	NO ₃	NH ₃	Org.
1960												
1/12	1431	S	P	0.0	21.0	31.87	-	-	3.8	4.5	0.3	-
-	-	M	P	"	19.4	33.37	-	-	1.3	2.0	0.1	-
-	-	B	P	0	19.5	33.40	-	-	1.5	1.8		

STATION 16	Depth of 23 feet			Lat. 27° 36' N.			Long. 82° 50' W.						
	Gymnodinium	Breve	M	C	•C	Sal	Ca	Alk	Si	Water	Sky	Wind	Sea
Date	Time	Depth	C	M					In	Light transm	Transp	Color	CA
1960	1/12 1414	S	P	0.0	20.2	31.78	-	-	4.3	5.2	0.2	-	-
-	-	M	0	-	19.8	33.24	-	-	1.6	2.2	0.2	-	-
-	-	B	0	-	19.6	33.62	-	-	1.2	1.7	0.3	-	-
2/23 1350	S	P	110	15.2	32.09	-	-	-	2.4	3.0	0.1	-	-
-	-	M	P	29	15.0	32.25	-	-	2.2	2.7	0.3	-	-
-	-	B	P	14	15.2	33.37	-	-	0.9	1.3	0.1	-	-
3/24 1337	S	P	62	18.4	30.05	-	-	-	0.5	1.1	0.1	-	-
-	-	M	P	16.8	16.2	31.22	-	-	2.5	2.7	0.1	-	-
-	-	B	P	15.2	16.0	32.61	-	-	0.9	1.0	0.1	-	-
4/25 1242	S	P	8	24.1	34.09	10.16	2.35	2.6	-	1.6	0.0	-	-
-	-	M	P	3	23.0	34.43	10.40	2.41	2.6	-	1.2	0.1	-
-	-	B	P	2	23.0	34.43	10.40	2.38	2.7	-	1.1	0.1	-
5/19 0951	S	0	-	25.2	32.99	9.94	2.40	6.5	-	4.5	0.3	-	-
-	-	M	0	-	24.5	33.75	10.13	2.34	5.6	-	2.6	0.2	-
-	-	B	0	-	23.5	34.47	10.49	2.40	5.9	-	1.6	0.2	-
6/20 1044	S	0	-	27.9	34.54	10.44	2.41	7.5	-	2.5	0.3	-	-
-	-	M	0	-	27.9	34.54	10.44	2.43	7.3	-	2.5	0.4	-
-	-	B	0	-	27.9	34.54	10.44	2.43	7.3	-	2.5	0.4	-
7/11 1427	S	0	-	30.4	34.51	10.44	2.43	5.4	-	3.4	0.1	-	-
-	-	M	0	-	30.9	34.36	10.67	2.42	3.9	-	3.1	0.2	-
-	-	B	0	-	30.9	34.42	10.53	2.41	8.0	-	2.3	0.0	-
8/8 1411	S	P	0.2	30.0	33.49	10.05	2.33	1.1	-	1.4	0.1	-	-
-	-	M	P	0.5	29.2	33.42	10.15	2.34	1.9	-	1.8	0.0	-
-	-	B	P	3	29.1	33.42	10.10	2.35	1.1	-	1.5	0.1	-
9/7 1445	S	P	0.3	29.4	32.74	9.94	2.29	8.2	-	1.9	0.2	-	-
-	-	M	P	0.7	29.2	32.90	9.94	2.30	9.6	-	1.6	0.1	-
-	-	B	P	0.1	29.2	33.04	10.05	2.31	10.3	-	1.5	0.1	-
10/15 1359	S	P	0.0	28.5	32.99	10.03	2.37	2.5	-	2.6	0.2	-	-
-	-	M	P	0.0	28.4	32.94	9.95	2.37	2.6	-	2.6	0.1	-
-	-	B	P	0.0	28.3	33.04	9.86	2.35	2.6	-	2.5	0.1	-
11/15 2236	S	0	-	23.0	33.71	10.20	2.38	1.6	-	1.0	0.0	-	-
-	-	M	0	-	23.0	33.75	10.04	2.38	1.5	-	1.0	0.1	-
-	-	B	0	-	22.8	33.82	10.15	2.38	1.8	-	1.0	0.1	-
12/20 1630	S	P	0.0	14.9	32.75	10.06	2.43	2.4	-	1.1	0.3	-	-
-	-	M	P	0.0	14.4	32.75	10.00	2.43	1.3	-	0.9	0.2	-
-	-	B	O	-	14.5	32.92	10.05	2.44	1.8	-	0.9	0.3	-
1961	1/29 1405	S	0	-	14.6	33.93	10.39	2.42	3.2	-	2.3	0.1	-
-	-	M	0	-	14.6	34.07	10.33	2.43	2.2	-	2.2	0.1	-
-	-	B	0	-	14.5	34.23	10.36	2.46	3.2	-	1.7	0.2	-
2/21 1734	S	P	0.0	19.2	34.00	10.37	2.38	1.4	-	1.2	0.2	-	-
-	-	M	P	0.1	18.9	34.05	10.40	2.39	1.3	-	1.6	0.1	-
-	-	B	P	0.1	18.8	33.93	10.40	2.39	1.1	-	1.6	0.1	-
3/5 1452	S	P	0.0	22.0	34.42	10.47	2.45	3.3	-	1.1	0.2	-	-
-	-	M	P	0.0	21.2	34.42	10.54	2.46	5.2	-	1.4	0.1	-
-	-	B	P	0.0	21.2	34.47	10.48	2.44	2.9	-	1.3	0.2	-
5/16 1347	S	0	-	26.7	34.63	10.65	2.46	1.2	-	2.5	0.0	-	-
-	-	M	0	-	25.7	34.97	10.67	2.46	1.4	-	2.1	0.2	-
-	-	B	0	-	25.6	35.25	10.85	2.46	2.0	-	1.6	0.1	-
6/6 0907	S	0	-	27.1	35.01	10.72	2.47	5.0	-	2.4	0.2	-	-
-	-	M	0	-	27.0	34.99	10.60	2.47	4.7	-	2.6	0.6	-
-	-	B	0	-	27.0	34.99	10.70	2.47	5.1	-	2.6	0.6	-
7/11 1255	S	0	-	30.6	35.73	10.90	2.48	2.2	-	2.4	1.3	-	-
-	-	M	0	-	30.6	35.70	10.83	2.48	2.9	-	2.8	0.6	-
-	-	B	0	-	30.4	35.73	10.91	2.48	2.1	-	2.3	1.8	-

STATION 17				Depth of 28 feet				Lat. 27° 34' N.				Long. 82° 50' W.				Sea		
Date	Time	Depth	C	Gymnodinium breve	M	°C	Sal	Ca	Alk	Si	In	Phosphorus	Nitrogen	Water	Sky	Wind	Sea	
											PO ₄ Tot	NO ₃ Tot	NO ₂ -N	CT	Vi	Amt	Dir	
1960	1/12	1359	S	0	-	20.6	32.83	-	-	-	2.3	2.9	0.0	-	-	-	12	L.G.
-	-	M	0	-	19.5	33.44	-	-	-	-	1.4	1.9	0.2	-	-	-	-	NW
-	-	B	0	-	19.7	34.04	-	-	-	-	0.9	1.3	0.2	-	-	-	-	
2/23	1334	S	P	190	15.2	32.84	-	-	-	-	1.1	1.5	0.3	-	-	-	7	M.G.
-	-	M	P	13	15.1	32.95	-	-	-	-	1.1	1.4	0.3	-	-	-	-	
-	-	B	P	41	15.3	33.58	-	-	-	-	0.8	1.1	0.1	-	-	-	-	
* 3/24	1359	S	P	17.2	16.5	31.56	-	-	-	-	2.9	3.4	0.1	-	-	-	12	J.G.
-	-	M	P	4.8	16.1	31.65	-	-	-	-	1.2	1.8	0.1	-	-	-	-	
-	-	B	P	4	15.9	33.69	-	-	-	-	0.2	0.9	0.1	-	-	-	-	
4/25	1224	S	P	3	23.8	34.58	10.20	2.40	3.2	-	0.7	0.5	-	-	-	-	17	D.G.
-	-	M	P	2	23.0	34.58	10.44	2.37	3.5	-	0.8	0.0	-	-	-	-	-	
-	-	B	P	2	23.0	34.58	10.32	2.41	3.3	-	0.9	0.2	-	-	-	-	-	
5/19	0936	S	P	0	-	25.1	33.15	10.41	2.39	5.4	-	3.9	0.1	-	-	-	15½	G.
-	-	M	O	-	24.0	34.11	10.27	2.39	4.1	-	1.7	0.2	-	-	-	-	-	
-	-	B	P	0	0	23.1	34.99	9.98	2.43	5.3	-	1.5	0.2	-	-	-	-	
6/20	1528	S	O	-	27.9	34.67	10.50	2.43	8.0	-	2.6	0.5	-	-	-	-	SW	
-	-	M	O	-	27.9	34.63	10.40	2.44	7.2	-	2.6	0.1	-	-	-	-		
-	-	B	O	-	27.8	34.63	10.52	2.44	7.4	-	2.5	0.1	-	-	-	-		
7/11	1409	S	P	0	-	31.3	35.05	10.62	2.42	3.6	-	2.1	0.1	-	-	-	14	L.G.
-	-	M	P	0	-	31.1	35.07	10.57	2.43	8.5	-	2.0	0.2	-	-	-	-	
-	-	B	O	-	30.7	35.07	10.73	2.44	6.6	-	1.6	0.2	-	-	-	-		
8/8	1342	S	P	2.8	30.0	33.77	10.10	2.35	1.4	-	1.3	0.1	-	-	-	-	13	D.G.
-	-	M	P	7	29.1	33.69	10.20	2.37	0.8	-	0.9	0.0	-	-	-	-	19	D.G.
-	-	B	P	7	29.0	33.80	10.27	2.37	1.3	-	1.2	0.0	-	-	-	-	7	
9/7	1418	S	P	0.2	29.6	33.35	10.20	2.31	7.4	-	1.0	0.2	-	-	-	-	18	D.G.
-	-	M	P	0.0	29.4	33.35	10.15	2.31	7.3	-	1.1	0.4	-	-	-	-	5	0,8,9
-	-	B	O	0	29.3	33.44	10.05	2.31	7.2	-	1.1	0.2	-	-	-	-	19	
10/5	1342	S	O	-	29.8	33.80	10.15	2.40	1.8	-	1.0	0.2	-	-	-	-	18	D.G.
-	-	M	O	-	29.4	33.75	10.15	2.40	2.0	-	1.2	0.1	-	-	-	-	5	1,2,8
-	-	B	O	-	29.5	33.87	10.15	2.40	1.7	-	1.2	0.2	-	-	-	-	18	
11/15	2204	S	O	-	23.0	32.48	9.90	2.38	1.2	-	4.8	0.4	-	-	-	-	4	E
-	-	M	O	-	22.9	32.54	9.95	2.38	1.2	-	4.5	0.1	-	-	-	-	37.5	-
-	-	B	O	-	23.7	34.49	10.34	2.40	2.7	-	0.9	0.3	-	-	-	-	7.2	
12/20	1612	S	O	-	14.5	32.63	9.80	2.43	1.8	-	2.1	0.4	-	-	-	-	0.6	
-	-	M	O	-	14.4	32.92	10.03	2.46	1.9	-	1.6	0.2	-	-	-	-	1	W
-	-	B	O	-	14.6	33.28	10.10	2.46	1.6	-	1.0	0.2	-	-	-	-	0.6	
1961	1/29	1348	S	0	-	14.6	34.25	10.34	2.44	2.2	-	1.5	0.2	-	-	-	5	M.G.
-	-	M	P	0	14.6	34.25	10.46	2.44	2.2	-	1.6	0.1	-	-	-	-	5	
-	-	B	O	-	14.5	34.33	10.33	2.47	2.3	-	1.3	0.1	-	-	-	-	26	D.G.
2/21	1719	S	P	0.1	19.1	34.05	10.55	2.38	1.0	-	1.5	0.2	-	-	-	-	14	L.G.
-	-	M	P	-	18.4	34.11	10.38	2.40	1.4	-	1.6	0.7	-	-	-	-	26	
-	-	B	P	0.1	18.4	34.00	10.50	2.38	2.0	-	1.5	0.1	-	-	-	-	14	D.G.
3/5	1436	S	P	0.0	21.7	34.56	10.47	2.44	3.6	-	1.3	1.3	-	-	-	-	55.8	12
-	-	M	P	0.1	21.1	34.40	10.55	2.41	3.0	-	1.1	0.1	-	-	-	-	38.5	
-	-	B	P	0.0	21.1	34.43	10.55	2.42	3.3	-	1.4	0.2	-	-	-	-	52.9	24
5/16	1330	S	O	-	26.6	34.83	10.61	2.46	1.7	-	2.3	0.0	-	-	-	-	19.7	
-	-	M	O	-	25.4	34.74	10.65	2.45	2.0	-	2.4	0.1	-	-	-	-	17.6	
-	-	B	O	-	26.9	35.21	10.69	2.47	3.6	-	1.7	0.4	-	-	-	-	11.8	
6/6	0842	S	O	-	26.9	35.21	10.65	2.47	3.0	-	1.6	0.2	-	-	-	-	2.0	
-	-	M	O	-	26.8	35.21	10.67	2.47	4.3	-	1.7	0.6	-	-	-	-	1.7	
7/11	1135	S	O	-	30.4	35.79	10.90	2.47	0.5	-	2.0	0.6	-	-	-	-	0.6	
-	-	M	O	-	30.3	35.79	10.82	2.48	1.0	-	1.7	0.2	-	-	-	-	1.9	
-	-	B	O	-	30.2	35.79	10.80	2.48	2.1	-	1.7	0.2	-	-	-	-	1.9	

STATION 19				Depth of 36 feet				Lat. 27°32.2' N.				Long. 82°50' W.			
Date	Time	Depth	C	Gymnodinium	Brevetoxin	°C	Sal	Ca	Alk	Si	In	Phosphorus	Nitrogen	Water	Sky
		C	M									PO ₄	NO ₃	Transp	Color
T960	1/12	1344	S	0	-	20.2	33.40	-	-	-	1.2	2.1	0.3	-	-
"	"	M	0	-	19.6	34.02	-	-	-	0.9	1.1	0.1	-	-	
-	-	B	0	-	20.0	34.29	-	-	-	0.6	0.9	0.3	-	-	
2/23	1312	S	P	380	15.2	32.27	-	-	-	2.0	2.3	0.2	-	-	
-	-	M	P	60	15.0	32.84	-	-	-	1.4	1.7	0.1	-	-	
-	-	B	P	33	15.0	33.13	-	-	-	1.2	1.4	0.1	-	-	
3/24	1414	S	P	52	18.7	32.03	-	-	-	1.8	2.1	0.1	-	-	
-	-	M	P	12	15.9	33.96	-	-	-	0.1	0.7	0.1	-	-	
-	-	B	P	11.2	15.8	34.18	-	-	-	0.2	0.8	0.2	-	-	
4/25	1203	S	P	0.8	23.5	34.47	10.43	2.27	3.0	-	0.7	0.1	-	-	
-	-	M	P	0.2	23.0	34.52	10.45	2.40	3.1	-	0.8	0.2	-	-	
-	-	B	P	0.2	23.0	34.58	10.42	2.40	3.3	-	0.8	0.3	-	-	
5/19	0920	S	P	0.0	25.2	33.23	9.90	2.38	5.1	-	4.2	0.1	0.6	-	
-	-	M	P	0.0	23.9	34.85	10.44	2.41	3.1	-	1.4	0.3	-	-	
-	-	B	O	-	23.2	33.35	9.45	2.38	5.4	-	3.9	0.2	-	-	
6/20	1009	S	O	-	27.8	34.81	10.74	2.44	6.4	-	1.9	0.3	-	-	
-	-	M	O	-	27.7	34.72	10.66	2.44	6.6	-	2.2	0.2	-	-	
-	-	B	O	-	27.7	34.74	10.51	2.44	6.6	-	2.0	0.1	-	-	
7/11	1351	S	O	-	31.1	35.19	10.73	2.44	6.4	-	1.6	0.1	1.2	-	
-	-	M	O	-	30.8	35.16	10.71	2.41	4.5	-	1.8	0.2	-	-	
-	-	B	O	-	30.7	35.16	10.80	2.42	3.9	-	1.6	0.2	-	-	
8/8	1308	S	P	2.6	29.7	33.84	10.33	2.37	1.5	-	1.2	0.1	6.5	-	
-	-	M	P	7	29.0	33.86	10.25	2.38	1.2	-	1.3	0.3	0.1	-	
-	-	B	P	1	29.1	34.11	10.34	2.37	2.8	-	0.9	0.1	-	-	
9/7	1358	S	P	0.1	29.4	33.30	10.10	2.34	6.4	-	1.2	0.3	4.7	-	
-	-	M	O	-	29.4	33.30	9.98	2.34	6.6	-	1.3	0.1	0.1	-	
-	-	B	O	-	29.3	33.35	10.15	2.30	7.5	-	1.1	0.3	-	-	
10/5	1323	S	O	-	28.6	33.82	10.20	2.42	2.3	-	1.0	0.1	2.9	-	
-	-	M	P	0.0	28.3	33.82	10.25	2.41	1.9	-	0.9	0.2	-	-	
-	-	B	O	-	28.3	33.78	10.21	2.39	3.0	-	1.1	0.4	-	-	
11/15	2136	S	O	-	23.2	32.90	9.90	2.42	1.5	-	3.8	0.6	10.6	-	
-	-	M	O	-	23.2	33.19	10.02	2.42	1.2	-	2.7	1.1	-	-	
-	-	B	O	-	23.1	33.35	10.01	2.38	1.2	-	2.5	0.1	-	-	
12/20	1553	S	O	-	13.2	33.15	10.09	2.42	1.4	-	1.3	0.6	0.6	-	
-	-	M	O	-	14.8	33.68	10.30	2.43	1.0	-	0.8	0.3	-	-	
-	-	B	O	-	15.4	33.91	10.30	2.46	1.2	-	1.0	0.3	-	-	
1961	1327	S	O	-	14.7	34.42	10.44	2.42	1.8	-	1.0	0.3	2.4	7.1	
-	-	M	O	-	14.7	34.42	10.44	2.42	1.0	-	1.1	0.1	-	-	
-	-	B	O	-	14.7	34.47	10.48	2.41	1.8	-	1.5	0.2	-	-	
2/21	1703	S	P	0.0	19.4	34.16	10.50	2.40	1.9	-	1.2	0.1	0.4	-	
-	-	M	P	0.0	18.2	34.05	10.45	2.41	1.9	-	1.3	0.1	0.2	-	
-	-	B	P	0.2	18.2	34.05	10.41	2.41	1.9	-	1.5	0.2	-	-	
3/5	1421	S	P	0.0	21.2	34.56	10.40	2.41	2.9	-	1.8	0.1	3.4	0.0	
-	-	M	P	0.1	21.2	34.51	10.44	2.43	2.7	-	0.9	0.2	-	-	
-	-	B	P	0.0	21.1	34.56	10.50	2.44	3.9	-	0.9	0.1	-	-	
5/16	1312	S	O	-	25.8	34.47	10.68	2.47	4.3	-	4.8	0.1	2.4	19.7	
-	-	M	O	-	25.3	35.50	10.90	2.45	2.6	-	0.9	0.4	-	-	
-	-	B	O	-	25.3	35.50	10.76	2.47	2.0	-	1.0	0.3	-	-	
6/6	0826	S	O	-	26.8	35.30	10.69	2.47	3.5	-	1.6	0.6	>44.7	2.1	
-	-	M	O	-	26.8	35.30	10.65	2.46	2.8	-	1.8	1.0	-	-	
-	-	B	O	-	26.9	35.25	10.65	2.47	2.6	-	1.6	0.4	-	-	
7/11	1116	S	O	-	30.4	35.79	10.90	2.47	0.6	-	1.6	0.7	-	-	
-	-	M	O	-	30.2	35.79	10.80	2.48	1.6	-	1.9	0.0	-	-	
-	-	B	O	-	30.2	35.88	10.80	2.47	2.1	-	1.8	1.1	-	-	

STATION 20 Depth of 32 feet Lat. 27°31.8' N.

Date	Time	Depth	Gymnodinium			Lat. 27°31.8' N.			Long. 82°49.4' W.				
			C breve	M M	°C	Sal	Ca	Alk	Si	In	PO ₄ In	NO ₃ Tot	Nitrogen NH ₃ Org NO ₂ -N
1960	1/20	1331	S	P	0.0	20.0	33.68	-	-	-	1.1	1.5	0.1
-	-	M	P	0.0	19.6	33.68	-	-	-	1.1	1.2	0.3	
-	-	B	O	-	19.7	34.13	-	-	-	1.2	1.0	0.1	
2/23	1256	S	P	12.1	15.1	32.52	-	-	-	1.6	2.0	0.2	
-	-	M	P	13	15.0	32.92	-	-	-	1.4	1.5	0.2	
-	-	B	P	10	15.0	33.04	-	-	-	1.2	1.6	0.2	
3/24	1429	S	P	8.0	19.1	31.15	-	-	-	2.7	2.7	0.2	
-	-	M	P	4.8	15.9	33.78	-	-	-	0.1	0.7	0.1	
-	-	B	P	12.4	15.9	33.91	-	-	-	0.3	0.7	0.1	
4/25	1146	S	P	3.4	23.8	34.45	10.73	2.32	3.2	-	0.7	0.1	
-	-	M	P	2.2	23.0	34.52	10.25	2.29	3.0	-	0.8	0.1	
-	-	B	P	0.3	23.0	34.54	10.53	2.37	3.4	-	0.8	0.2	
5/19	0908	S	O	-	25.1	33.44	9.63	2.32	5.0	-	3.3	0.2	
-	-	M	O	-	24.2	33.93	10.20	2.39	3.9	-	2.1	0.3	
-	-	B	O	-	23.4	35.01	10.46	2.41	2.8	-	1.1	0.4	
6/20	1000	S	O	-	27.7	34.81	10.60	2.44	7.1	-	1.6	0.3	
-	-	M	O	-	27.7	34.83	10.80	2.42	7.2	-	2.4	0.2	
-	-	B	O	-	27.7	34.81	10.74	2.43	7.1	-	1.9	0.1	
7/11	1336	S	O	-	31.0	35.08	10.60	2.42	3.8	-	1.7	0.2	
-	-	M	O	-	30.7	35.16	10.67	2.41	3.5	-	1.8	0.4	
-	-	B	O	-	30.6	35.16	10.90	2.43	4.0	-	1.4	0.1	
8/8	1246	S	P	1.3	29.9	33.62	10.25	2.37	2.1	-	0.8	0.2	
-	-	M	P	4.7	29.0	33.77	10.30	2.37	1.8	-	1.0	0.0	
-	-	B	P	2.5	29.0	33.84	10.35	2.37	2.0	-	0.8	0.2	
9/7	1337	S	P	0.0	29.4	33.28	10.04	2.29	6.3	-	1.5	0.3	
-	-	M	P	0.0	29.3	33.28	10.00	2.31	6.4	-	1.2	0.1	
-	-	B	O	-	29.3	33.25	10.00	2.34	6.7	-	1.1	0.1	
10/5	1306	S	O	-	28.6	33.78	9.45	2.22	2.0	-	1.2	0.3	
-	-	M	O	-	28.3	33.78	10.10	2.33	2.0	-	1.1	0.1	
-	-	B	O	-	28.3	33.82	10.13	2.40	2.2	-	1.0	0.2	
11/15	2118	S	O	-	23.1	33.65	9.86	2.33	1.5	-	4.5	0.1	
-	-	M	O	-	23.5	32.72	9.83	2.37	1.7	-	4.3	0.2	
-	-	B	P	0.0	23.9	34.52	10.40	2.42	2.5	-	0.9	0.3	
12/20	1540	S	O	-	15.3	33.28	10.20	2.42	2.2	-	1.0	0.4	
-	-	M	O	-	15.0	33.44	10.07	2.45	1.2	-	1.0	0.5	
-	-	B	O	-	15.4	33.87	10.30	2.47	1.6	-	1.2	0.4	
1961	1/29	1315	S	O	-	14.8	34.34	10.35	2.40	1.4	-	1.7	0.2
-	-	M	O	-	14.7	34.40	10.33	2.41	1.0	-	1.4	0.2	
-	-	B	O	-	14.7	34.42	10.43	2.45	1.3	-	1.7	0.2	
2/21	1653	S	P	0.0	19.4	34.22	10.40	2.42	0.9	-	1.3	0.2	
-	-	M	O	-	18.5	34.16	10.45	2.40	1.2	-	1.5	0.2	
-	-	B	P	0.1	18.0	34.16	10.45	2.41	1.3	-	1.5	0.2	
3/5	1402	S	P	0.0	21.8	34.47	10.56	2.44	3.3	-	0.9	1.1	
-	-	M	P	6.1	21.2	34.49	10.52	2.43	3.4	-	0.9	0.3	
-	-	B	P	0.0	21.2	34.51	10.54	2.44	2.9	-	1.0	1.5	
5/16	1254	S	O	-	26.6	34.72	10.70	2.47	2.7	-	3.3	0.0	
-	-	M	O	-	25.4	35.25	10.68	2.46	2.4	-	1.6	0.1	
-	-	B	O	-	25.4	34.92	10.60	2.46	2.3	-	3.1	0.2	
6/6	0808	S	O	-	26.9	35.25	10.72	2.47	3.1	-	1.8	0.9	
-	-	M	O	-	26.9	35.25	10.59	2.46	2.8	-	1.8	0.6	
-	-	B	O	-	26.9	35.25	10.59	2.47	2.7	-	1.7	0.5	
7/11	1054	S	O	-	30.2	35.79	10.70	2.44	1.1	-	2.0	1.5	
-	-	M	O	-	30.7	35.79	10.90	2.47	1.0	-	2.0	1.2	
-	-	B	O	-	30.7	35.79	10.80	2.47	1.1	-	1.9	2.2	

Time	Depth	C	°C	Sal	Ca	Alk	Si	In	Light transm	Transp	Color	CA	CT	Vi	Amt Dir	Amt Dir	Sea
1/20	1331	S	0.0	20.0	33.68	-	-	-	-	-	16½	L.G.	2	1	-	2	NE
-	-	M	P	0.0	19.6	33.68	-	-	-	-	5	M.G.	8	1	-	3	NE
-	-	B	O	-	19.7	34.13	-	-	-	-	12	L.G.	1	-	-	1	SW
2/23	1256	S	P	12.1	15.1	32.52	-	-	-	-	-	-	-	-	-	-	NW
-	-	M	P	13	15.0	32.92	-	-	-	-	-	-	-	-	-	-	W
-	-	B	P	10	15.0	33.04	-	-	-	-	-	-	-	-	-	-	E
3/24	1429	S	P	8.0	19.1	31.15	-	-	-	-	-	-	-	-	-	-	SW
-	-	M	P	4.8	15.9	33.78	-	-	-	-	-	-	-	-	-	-	E
-	-	B	P	12.4	15.9	33.91	-	-	-	-	-	-	-	-	-	-	SW
4/25	1146	S	P	3.4	23.8	34.45	10.73	2.32	3.2	-	0.7	0.1	-	-	-	-	SW
-	-	M	P	2.2													

STATION 21A	Depth of 41 feet			Lat. 27°35.8' N.			Long. 82°52.2' W.			
	Cyanodinum			• C	Sal	Ca	Alk	Si		
Date	Time	Depth	C breve M	M	M	M	M	M		
1960										
-	-	1/11 0934	S	P	0.1	19.5	33.17	-	-	
-	-	M	P	0.0	19.5	33.40	-	-	1.8 0.4 -	
-	-	B	P	0.0	19.5	34.04	-	-	0.8 1.0 -	
2/24	0928	S	P	130	15.8	33.53	-	-	0.5 1.1 0.1	
-	-	M	P	90	15.0	33.62	-	-	0.6 0.9 0.1	
-	-	B	P	20	15.0	33.62	-	-	0.3 0.8 0.1	
3/23	0930	S	P	220	15.6	31.58	-	-	0.3 0.7 0.2	
-	-	M	P	34	15.8	34.00	-	-	0.3 0.7 0.1	
-	-	B	P	34	15.8	34.14	-	-	0.5 0.6 0.1	
4/19	0928	S	P	10.6	22.4	33.19	9.70	2.37	0.8 -	
-	-	M	P	0.0	20.9	34.43	10.25	2.40	1.5 -	
-	-	B	P	0.0	20.7	34.47	10.14	2.40	1.5 -	
5/17	0759	S	0	-	24.1	33.66	10.14	2.37	2.0 -	
-	-	M	0	-	23.9	33.96	10.25	2.39	0.9 -	
-	-	B	P	0.1	22.7	35.01	10.54	2.41	2.8 -	
6/15	0945	S	0	-	27.3	34.23	9.99	2.34	4.5 -	
-	-	M	0	-	26.9	34.63	10.30	2.35	3.9 -	
-	-	B	P	0	-	34.99	10.48	2.40	4.3 -	
7/7	0815	S	0	-	30.8	34.54	10.22	2.37	3.9 -	
-	-	M	0	-	30.0	34.99	10.50	2.40	3.1 -	
-	-	B	P	0	-	29.8	35.16	10.80	2.42	4.4 -
8/4	0932	S	P	1	29.0	32.88	10.00	2.32	0.5 -	
-	-	M	P	2.6	28.7	33.44	10.12	2.31	0.8 -	
-	-	B	P	1.1	28.8	35.08	10.60	2.38	1.7 -	
9/27	0855	S	P	0.0	27.9	31.42	9.50	2.25	0.6 -	
-	-	M	0	-	28.2	33.19	10.08	2.33	2.1 -	
-	-	B	P	0	-	28.0	33.26	10.10	2.38	6.9 -
10/11	0850	S	P	2	28.1	32.47	9.76	2.29	1.9 -	
-	-	M	P	2.4	28.3	33.04	9.90	2.33	4.2 -	
-	-	B	P	0.6	28.4	33.22	10.14	2.37	4.4 -	
11/14	0906	S	P	0.0	22.4	32.86	9.90	2.38	0.8 -	
-	-	M	P	0.0	22.3	33.04	9.90	2.38	0.9 -	
-	-	B	P	0	-	24.0	34.72	10.44	2.44	3.0 -
12/8	0901	S	0	-	17.8	33.33	10.20	2.40	1.3 -	
-	-	M	0	-	18.4	34.07	10.16	2.38	1.5 -	
-	-	B	P	0.0	18.7	34.04	10.30	2.40	0.9 -	
1961										
-	-	1/12 0903	S	0	-	14.6	34.25	10.16	2.33 1.0 -	
-	-	M	P	0	-	14.7	34.60	10.10	2.38 1.8 -	
-	-	B	P	0	-	14.7	34.88	10.30	2.38 1.1 -	
2/28	0916	S	P	0.1	19.2	34.25	10.53	2.43	1.8 -	
-	-	M	P	0.0	19.2	34.25	10.53	2.44	2.9 -	
-	-	B	P	0	-	18.4	34.72	10.49	2.46 1.9 -	
3/2	0906	S	0	-	20.4	33.95	10.30	2.42	3.1 -	
-	-	M	P	0.1	20.1	34.20	10.36	2.44	2.2 -	
-	-	B	P	0.0	19.9	34.51	10.45	2.42	2.7 -	
5/15	0859	S	0	-	25.5	34.88	10.61	2.28	3.2 -	
-	-	M	P	0	-	25.4	35.03	10.70	2.39 2.7 -	
-	-	B	P	0	-	25.2	35.50	10.90	2.44 2.3 -	
6/5	0845	S	0	-	26.9	35.03	10.48	2.41	3.8 -	
-	-	M	P	0	-	26.9	35.03	10.60	2.44 3.3 -	
-	-	B	P	0	-	26.6	35.50	10.80	2.46 3.3 -	
7/10	0853	S	0	-	30.2	35.79	11.16	2.43	0.3 -	
-	-	M	P	0	-	30.2	35.79	10.88	2.45 0.4 -	
-	-	B	P	0	-	30.2	35.84	10.90	2.46 2.0 -	

STATION 21A	Depth of 41 feet			Lat. 27°35.8' N.			Long. 82°52.2' W.			
	Cyanodinum			• C	Sal	Ca	Alk	Si		
Date	Time	Depth	C breve M	M	M	M	M	M		
1960										
-	-	1/11 0934	S	P	0.1	19.5	33.17	-	-	
-	-	M	P	0.0	19.5	33.40	-	-	0.8 1.0 -	
2/24	0928	S	P	130	15.8	33.53	-	-	0.5 1.1 0.8	
-	-	M	P	90	15.0	33.62	-	-	0.6 0.9 0.1	
-	-	B	P	20	15.0	33.62	-	-	0.3 0.8 0.1	
3/23	0930	S	P	220	15.6	31.58	-	-	0.3 0.7 0.1	
-	-	M	P	34	15.8	34.14	-	-	0.5 0.6 0.1	
4/19	0928	S	P	10.6	22.4	33.19	9.70	2.37	0.8 -	
-	-	M	P	0.0	20.9	34.43	10.25	2.40	1.5 -	
-	-	B	P	0.0	20.7	34.47	10.14	2.40	1.5 -	
5/17	0759	S	0	-	24.1	33.66	10.14	2.37	2.0 -	
-	-	M	0	-	23.9	33.96	10.25	2.39	0.9 -	
-	-	B	P	0.1	22.7	35.01	10.54	2.41	2.8 -	
6/15	0945	S	0	-	27.3	34.23	9.99	2.34	4.5 -	
-	-	M	0	-	26.9	34.63	10.30	2.35	3.9 -	
-	-	B	P	0	-	34.99	10.48	2.40	4.3 -	
7/7	0815	S	0	-	30.8	34.54	10.22	2.37	3.9 -	
-	-	M	0	-	30.0	34.99	10.50	2.40	3.1 -	
-	-	B	P	0	-	29.8	35.16	10.80	2.42	4.4 -
8/4	0932	S	P	1	29.0	32.88	10.00	2.32	0.5 -	
-	-	M	P	2.6	28.7	33.44	10.12	2.31	0.8 -	
-	-	B	P	1.1	28.8	35.08	10.60	2.38	1.7 -	
9/27	0855	S	P	0.0	27.9	31.42	9.50	2.25	0.6 -	
-	-	M	0</td							

Date	Time	Depth	Depth of 45 feet			Lat. 27°35.8' N.			Long. 82°54.4' W.				
			Gymnodinium	breve	°C	Sal	Ca	Alk	Si	In	Light transm.	Water transm.	
		C	M				PO ₄	NO ₃	NH ₃	Org	Sky	Wind	
							In	Tot	NO ₂ -N				
1/11	0950	S	P	0.0	19.6	33.10	-	-	1.8	2.0	0.2	-	
-	-	M	O	-	19.4	33.86	-	-	0.4	1.1	0.3	-	
-	-	B	O	-	19.6	34.29	-	-	0.4	0.9	0.2	-	
2/24	0946	S	P	170	15.1	33.57	-	-	0.4	0.9	0.4	-	
-	-	M	P	70	15.1	33.62	-	-	0.5	0.9	0.2	-	
-	-	B	P	60	15.2	33.89	-	-	0.3	0.5	0.1	-	
3/23	0945	S	P	260	15.7	30.66	-	-	0.2	0.6	0.2	-	
-	-	M	P	50	15.7	34.33	-	-	0.3	0.5	0.2	-	
-	-	B	P	32	15.6	34.56	-	-	0.3	0.5	0.1	-	
4/19	0953	S	P	14.4	22.6	33.30	9.86	2.38	0.6	2.6	0.2	-	
-	-	M	P	0.0	21.0	34.47	10.28	2.41	0.9	0.9	0.3	-	
-	-	B	O	-	19.8	34.63	10.45	2.41	1.6	-	0.9	0.1	
5/17	0820	S	O	-	24.0	33.89	10.35	2.34	1.0	-	4.1	-	
-	-	M	P	0	-	23.9	34.14	10.33	2.37	0.5	-	-	
-	-	B	P	0.0	22.3	35.12	10.63	2.42	2.5	-	0.9	0.2	
6/15	1000	S	O	-	27.3	34.45	10.37	2.42	3.0	-	2.0	0.3	
-	-	M	O	-	26.9	34.90	10.53	2.42	2.3	-	1.8	0.1	
-	-	B	O	-	26.6	35.16	10.60	2.42	4.0	-	1.6	0.2	
7/7	0829	S	O	-	30.6	34.76	10.48	2.42	0.9	-	2.6	0.1	
-	-	M	O	-	30.0	35.14	10.77	2.43	0.9	-	1.1	0.1	
-	-	B	O	-	29.5	35.30	10.64	2.43	4.4	-	1.1	0.1	
8/4	0957	S	P	32	29.1	33.37	10.11	2.32	1.0	-	2.1	0.1	
-	-	M	P	8	29.0	34.99	10.70	2.38	1.7	-	0.7	0.1	
-	-	B	P	1.4	28.8	35.21	10.70	2.38	2.7	-	0.6	0.1	
9/27	0915	S	P	0.0	28.2	33.22	10.03	2.34	1.8	-	1.2	0.0	
-	-	M	O	-	28.2	33.40	10.10	2.32	2.3	-	1.1	0.1	
-	-	B	O	-	28.1	33.60	10.20	2.26	5.3	-	1.4	0.1	
10/11	0906	S	P	4	27.9	32.86	9.91	2.35	3.3	-	1.9	0.1	
-	-	M	P	0.1	28.1	33.01	9.98	2.34	3.7	-	1.8	0.2	
-	-	B	P	0.0	28.2	33.42	10.05	2.34	4.6	-	1.2	0.3	
11/14	0929	S	P	0.0	22.2	32.63	9.77	2.41	0.8	-	1.4	0.8	
-	-	M	P	0.0	22.2	33.08	9.85	2.40	1.2	-	0.9	0.0	
-	-	B	O	-	23.8	34.87	10.48	2.40	2.3	-	1.0	0.2	
12/8	0925	S	O	-	17.2	32.72	10.01	2.43	1.2	-	0.8	0.3	
-	-	M	O	-	19.0	34.31	10.41	2.40	1.2	-	0.6	0.1	
-	-	B	O	-	19.1	34.31	10.34	2.40	1.7	-	0.6	0.5	
1961	1/12	0924	S	O	-	14.6	34.45	10.20	2.38	1.8	-	1.6	0.1
-	-	M	O	-	14.7	34.34	10.29	2.38	1.1	-	1.7	0.1	
-	-	B	O	-	14.7	35.08	10.50	2.38	1.8	-	0.6	0.1	
2/28	0938	S	P	0.2	19.0	34.43	10.55	2.44	2.5	-	1.2	0.1	
-	-	M	P	0.3	18.7	34.38	10.45	2.44	2.3	-	0.9	0.1	
-	-	B	P	0.0	18.2	34.92	10.69	2.45	2.4	-	0.6	0.3	
3/2	0918	S	O	-	19.8	34.43	10.45	2.43	3.6	-	1.3	0.0	
-	-	M	O	-	19.8	34.42	10.38	2.42	2.0	-	1.4	0.4	
-	-	B	O	-	19.4	34.43	10.32	2.44	2.2	-	0.4	-	
5/15	0917	S	O	-	25.6	35.16	10.74	2.46	2.7	-	1.9	0.1	
-	-	M	P	0.0	25.2	35.44	10.85	2.46	2.1	-	1.1	0.2	
-	-	B	O	-	25.1	35.53	10.94	2.48	2.2	-	0.7	0.0	
6/5	0908	S	P	0.0	26.8	35.17	10.63	2.47	2.5	-	1.0	0.4	
-	-	M	O	-	26.8	35.97	11.00	2.47	2.5	-	0.8	0.3	
-	-	B	O	-	29.9	35.99	11.00	2.46	2.8	-	0.8	1.6	
7/10	0916	S	O	-	30.3	35.88	10.90	2.46	0.3	-	0.8	1.7	
-	-	M	O	-	30.2	35.97	11.00	2.47	0.9	-	0.8	0.3	
-	-	B	O	-	29.9	35.99	11.00	2.46	2.8	-	0.8	1.6	

- NE 2 NW

- SW 2 SW

- NE 2 NE

- E 2 NW

- SW 2 SW

- NE 2 NE

- SW 2 SW

- L.G. 0

- D.G. 0

- D.G. 5

- D.G. 0

- D.G. 2

- D.G. 2

- D.G. 7

- 25 D.G. -

- 22 D.G. -

- 24 L.G. -

- 15 G. -

- 16 L.G. -

- 10½ D.G. -

- 16 D.G. -

- 42 L.G. -

STATION 21		Depth of 48 feet			Lat. 27° 35.8' N.			Long. 82° 57.1' W.			
Date	Time	Depth	C	Gymnodinium breve	°C	Sal	Ca	Alk	Si	Phosphorus PO ₄	Nitrogen NO ₃ -NH ₃ Org NO ₂ -N
		C	M				In	Tot		Water	Sky
1960											
1/11	1007	1	P	0.0	19.3	33.33	-	-	1.1	1.5	0.2
-	-	2	O	-	19.3	34.33	-	-	0.3	0.8	0.5
-	-	3	P	0.0	19.4	34.56	-	-	0.3	0.6	0.3
-	-	4	P	0.0	19.6	34.58	-	-	0.5	0.7	0.3
2/24	1007	1	P	48	15.2	33.57	-	-	0.6	1.1	0.1
-	-	2	P	150	15.2	33.62	-	-	0.4	1.0	0.2
-	-	3	P	20	15.5	33.86	-	-	0.4	0.6	0.1
-	-	4	P	25	15.5	34.33	-	-	0.3	0.7	0.1
3/23	1000	1	P	180	15.6	31.46	-	-	0.4	0.6	0.3
-	-	2	P	26	15.4	32.52	-	-	0.4	0.4	0.1
-	-	3	P	22	15.4	34.74	-	-	0.5	0.5	0.2
-	-	4	P	16	15.4	34.49	-	-	0.4	0.6	0.3
4/19	1010	1	P	21	22.0	33.93	10.24	2.34	0.8	1.6	0.2
-	-	2	P	0.4	20.5	34.36	10.35	2.40	0.4	0.8	0.2
-	-	3	O	-	19.5	34.61	10.33	2.40	0.5	0.7	0.2
-	-	4	O	-	18.8	34.79	10.33	2.40	0.8	0.7	0.5
5/17	0841	1	P	0.0	24.0	34.42	10.30	2.34	0.6	1.6	0.2
-	-	2	O	-	23.7	34.29	10.44	2.37	0.5	1.7	0.2
-	-	3	O	-	22.1	34.34	10.60	2.39	0.5	1.0	0.2
-	-	4	O	-	22.1	35.34	10.73	2.41	0.8	0.7	0.2
6/15	1025	1	O	-	26.8	35.07	10.58	2.42	2.0	1.4	0.1
-	-	2	O	-	26.6	35.07	10.60	2.41	2.0	1.5	0.1
-	-	3	O	-	26.4	35.16	10.60	2.42	2.0	1.5	0.2
-	-	4	O	-	26.4	35.26	10.65	2.42	2.1	1.2	0.2
7/7	0842	1	O	-	30.5	34.74	10.52	2.42	0.7	2.3	0.1
-	-	2	O	-	30.4	34.81	10.58	2.44	0.5	0.8	0.4
-	-	3	O	-	29.2	35.25	10.55	2.42	1.7	2.2	0.1
-	-	4	O	-	29.2	35.34	10.65	2.42	2.5	1.1	0.2
8/4	1020	1	P	90	29.3	33.95	10.47	2.33	1.2	1.3	0.1
-	-	2	P	10	29.0	33.95	10.36	2.32	1.2	1.1	0.1
-	-	3	P	8	28.9	34.58	10.55	2.36	1.5	1.0	0.1
-	-	4	P	3.4	28.9	35.32	10.74	2.38	2.1	0.5	0.1
9/27	0933	1	P	0.0	28.2	33.68	10.25	2.27	3.2	0.9	0.1
-	-	2	P	0.0	28.2	33.69	10.22	2.30	3.4	1.0	0.0
-	-	3	O	-	28.2	33.93	10.26	2.29	3.9	1.0	0.0
-	-	4	O	-	28.2	34.29	10.37	2.30	3.9	0.8	0.1
10/11	0927	1	P	0.1	27.9	33.01	9.90	2.36	3.1	1.8	0.6
-	-	2	P	0.1	28.0	32.94	9.90	2.35	3.0	1.8	0.1
-	-	3	O	-	28.2	33.39	9.93	2.34	3.7	1.0	0.9
-	-	4	O	-	28.2	34.69	10.50	2.42	3.6	0.8	0.4
11/14	0952	1	P	0.0	22.0	33.31	9.96	2.40	1.6	0.7	0.0
-	-	2	O	-	22.5	33.31	10.10	2.39	1.3	0.8	0.0
-	-	3	O	-	23.3	34.33	10.32	2.41	1.7	0.8	1.0
-	-	4	O	-	23.8	35.05	10.52	2.42	2.0	0.8	0.1
12/8	1004	1	O	-	17.3	32.68	10.01	2.41	1.9	0.7	0.2
-	-	2	O	-	17.3	33.80	10.21	2.41	1.7	0.7	0.2
-	-	3	O	-	19.2	32.75	9.95	2.42	2.1	0.5	0.1
-	-	4	O	-	19.3	34.36	10.35	2.40	3.1	0.8	0.1

Water Transp Color CA CT Vi Am Dir Arnt Dir Sea

In Light transm

D.G. 2 - - 32 D.G. 2 - - 2 NE 2 NW

L.G. 0 - - 10 M.G. 8 - - 4 E 2 SW 2 SW

B.G. 0 - - 36 D.G. 5 1.8 8 3 NE 2 NE

D.G. 0 - - 30 D.G. 0 - - 7 1 NW 0

B.G. 2 8 8 1 WNW 1 NW

D.G. 6 8 8 0 0

G. 6 8 8 0 0

D.G. 7 2,3,4,8 7 3 S 2 S

D.G. 6 8 8 0 0

G. 3 8 7 2 SE 2 SW

G. 3 8 7 3 E 1 NE

D.G. 1 8 6 5 NE 2 NE

G. 7 45.4 19.3 11.0 5.8

G. 49.2 21 L.G. 6 6.8 4 1 N 1 SE

STATION 21 (Continued)

Date	Time	Depth	Depth of 48 feet						Lat. 27°35.8' N.						Long. 82°57.1' W.											
			Gymnodinium	breve	°C	Sal	CA	Alk	Si	In	PO ₄	NO ₃	NH ₃	Org	In	Light	Transp	Color	CA	CT	Vi	Amt	Dir	Ant	Sea	
C	M									Tot					transm	transm										
1961																										
1/12	0945	1	0	-	14.8	34.34	10.40	2.38	1.0	-	2.0	0.2	1.8	8.3	2.3	53.8	-	G.	7	6	6	4	ENE	2	ENE	
-	-	2	0	-	14.8	34.70	10.40	2.38	1.0	-	1.5	0.2	-	-	-	-	-	-	-	-	-	22.2				
-	-	3	0	-	14.8	35.10	10.50	2.38	1.2	-	0.6	0.2	-	-	-	-	-	-	-	-	-	11.5				
-	-	4	P	0.0	14.7	35.23	10.57	2.38	0.9	-	0.8	0.2	-	-	-	-	-	-	-	-	-	7.7				
2/28	1003	1	P	0.2	18.9	34.60	10.50	2.43	1.9	-	1.0	0.1	-	13.7	1.3	56.7	6	M.G.	1	0,1,2	7	3	SE	2	SE	
-	-	2	P	0.0	18.2	34.61	10.48	2.42	1.7	-	1.0	0.2	-	-	-	-	-	-	-	-	-	21.1				
-	-	3	P	0.0	18.2	35.07	10.69	2.44	1.7	-	0.4	0.1	-	-	-	-	-	-	-	-	-	6.8				
-	-	4	P	0.0	18.2	34.60	10.60	2.43	2.7	-	1.0	0.2	-	-	-	-	-	-	-	-	-	2.0				
3/2	0938	1	P	0.0	19.4	34.88	10.50	2.43	2.4	-	0.9	-	-	12.4	0.1	-	-	10	G.	7	8	6	4	N	I	NW
-	-	2	P	0.0	19.3	34.88	10.57	2.42	2.8	-	0.8	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	3	P	0.0	19.0	34.99	10.44	2.43	2.3	-	0.7	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	4	P	0.0	19.0	34.99	10.50	2.42	2.4	-	0.8	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	
5/15	0938	1	0	-	25.2	35.59	10.68	2.45	1.7	-	0.7	0.1	2.9	12.6	3.9	65.0	30	G.	0	-	8	1	SE	1	S	
-	-	2	P	0.1	25.0	35.77	10.97	2.45	1.4	-	0.7	0.2	-	-	-	-	-	-	-	-	-	33.0				
-	-	3	O	-	24.8	35.62	10.90	2.45	1.8	-	0.6	0.2	-	-	-	-	-	-	-	-	-	24.0				
-	-	4	P	0.0	24.6	35.62	10.80	2.45	1.6	-	0.6	1.0	-	-	-	-	-	-	-	-	-	15.0				
6/5	0931	1	0	-	26.6	35.35	10.78	2.42	2.0	-	1.1	0.3	-	32.3	4.4	68.4	30	D.G.	4	4,8	7	2	SE	1	SE	
-	-	2	O	-	26.6	35.35	10.78	2.44	2.4	-	0.7	"	-	-	-	-	-	-	-	-	-	37.5				
-	-	3	O	-	26.6	35.35	10.70	2.44	2.0	-	0.8	0.8	-	-	-	-	-	-	-	-	-	26.3				
-	-	4	P	0.0	26.4	35.48	10.80	2.44	1.7	-	0.7	0.5	-	-	-	-	-	-	-	-	-	13.8				
7/10	0936	1	0	-	30.3	36.06	11.00	2.47	0.8	-	1.2	0.1	-	32.0	2.4	28.3	25	G.	6	1,8	7	0	-	0		
-	-	2	O	-	30.2	36.02	10.93	2.47	0.8	-	1.0	0.2	-	-	-	-	-	-	-	-	-	18.6				
-	-	3	O	-	29.8	36.06	10.90	2.46	0.6	-	0.6	1.4	-	-	-	-	-	-	-	-	-	5.3				
-	-	4	O	-	29.7	36.06	11.00	2.46	0.6	-	0.5	0.8	-	-	-	-	-	-	-	-	-	3.7				

STATION 23	Depth of 78 feet			Lat. 27°35.8' N.			Long. 83°08.2' W.														
	Date	Time	Depth	Gymnodinium breve M	•C	Sai	Ca	Alk	Si	In	Phosphorus PO ₄	Nitrogen NO ₃ NH ₃ Org	In	Light	Water transp	Sky	Wind Dir	Sea amt	Dir		
1960 1/11	1156	1	0	"	19.6	34.87	-	-	-	0.1	0.5	0.6	-	-	36	D.G.	6	-	NE		
-	-	2	P	0.0	19.6	35.08	-	-	-	0.3	0.6	0.3	-	-	-	-	-	-	-		
-	-	3	P	0.0	19.7	35.25	-	-	-	0.4	0.5	0.2	-	-	-	-	-	-	-		
-	-	4	P	0.0	20.2	35.62	-	-	-	0.1	0.5	0.5	-	-	-	-	-	-	-		
2/24	1053	1	P	175	15.7	34.76	-	-	-	0.3	0.7	0.3	-	-	-	14	G.	8	-	ESE	
-	-	2	P	68	15.7	34.76	-	-	-	0.2	0.6	0.2	-	-	-	-	-	-	-		
-	-	3	P	10	15.6	34.76	-	-	-	0.1	0.5	0.2	-	-	-	-	-	-	-		
-	-	4	P	0.8	15.7	35.26	-	-	-	0.4	0.6	0.1	-	-	-	-	-	-	-		
3/23	1045	1	P	220	15.7	32.30	-	-	-	0.4	0.4	0.1	-	-	-	12	L.G.	0	-	SW	
-	-	2	P	5	15.4	34.13	-	-	-	0.3	0.4	0.3	-	-	-	-	-	-	-		
-	-	3	P	4	15.4	34.90	-	-	-	0.3	0.5	0.2	-	-	-	-	-	-	-		
-	-	4	P	8	15.1	35.57	-	-	-	0.3	0.5	0.1	-	-	-	-	-	-	-		
4/19	1057	1	P	3.2	21.2	34.52	10.25	2.39	0.4	-	0.4	0.2	2.4	-	-	-	36	B.G.	4	1,8	8 3 NE
-	-	2	P	0.0	20.8	34.65	10.50	2.40	0.3	-	0.8	0.1	-	-	-	-	-	-	-		
-	-	3	P	0	19.1	34.45	10.42	2.40	0.2	-	0.5	0.1	-	-	-	-	-	-	-		
-	-	4	P	0.0	16.2	35.37	10.66	2.42	0.8	-	0.6	0.2	-	-	-	-	-	-	-		
5/17	0931	1	P	0.0	23.2	35.44	10.76	2.41	0.5	-	0.3	0.2	0.0	-	-	-	-	-	-		
-	-	2	P	0.0	22.9	35.52	10.73	2.41	0.1	-	0.4	0.3	-	-	-	-	-	-	-		
-	-	3	P	0	22.6	35.59	10.73	2.41	0.1	-	0.4	0.2	-	-	-	-	-	-	-		
-	-	4	P	0	20.8	35.71	10.80	2.40	0.7	-	0.7	0.2	-	-	-	-	-	-	-		
6/15	1115	1	0	-	26.8	35.53	10.75	2.42	1.8	-	0.8	0.1	-	-	-	-	-	-	-		
-	-	2	0	-	26.4	35.53	10.65	2.42	1.0	-	0.6	0.2	-	-	-	-	-	-	-		
-	-	3	0	-	26.3	35.53	10.60	2.41	1.1	-	0.8	0.1	-	-	-	-	-	-	-		
-	-	4	0	-	24.6	35.71	10.83	2.42	2.5	-	0.6	0.4	-	-	-	-	-	-	-		
7/7	0926	1	0	-	30.4	35.71	10.65	2.43	0.5	-	0.4	0.1	0.6	-	-	-	18	G.	2	8 1 WNW 1 NW	
-	-	2	0	-	28.4	35.95	10.78	2.42	0.0	-	0.6	0.2	-	-	-	-	-	-	-		
-	-	3	0	-	27.8	35.95	10.85	2.42	0.1	-	0.5	0.1	-	-	-	-	-	-	-		
-	-	4	0	-	27.0	36.08	11.05	2.44	3.3	-	0.6	0.6	-	-	-	-	-	-	-		
8/4	1110	1	P	150	29.2	35.52	10.84	2.38	3.0	-	0.5	0.1	4.1	-	-	-	24	B.G.	7 1,3,4,8	7 3 SE	
-	-	2	P	39	29.1	35.44	10.72	2.40	2.4	-	0.6	0.1	-	-	-	-	-	-	-		
-	-	3	P	38	29.1	35.46	10.75	2.40	2.3	-	0.7	0.4	-	-	-	-	-	-	-		
-	-	4	P	11.8	28.9	35.52	10.85	2.40	2.3	-	1.3	0.2	-	-	-	-	-	-	-		
9/27	1010	1	P	0.0	28.4	34.90	10.60	2.32	2.2	-	0.5	0.0	3.5	-	-	-	48	B.G.	3	8 7 3 SE	
-	-	2	0	-	28.2	35.19	10.70	2.32	2.4	-	0.5	0.1	-	-	-	-	-	-	-		
-	-	3	P	0.0	28.0	35.34	10.60	2.34	2.2	-	0.3	0.0	-	-	-	-	-	-	-		
-	-	4	0	-	27.2	35.25	10.74	2.27	2.2	-	0.5	0.1	-	-	-	-	-	-	-		
10/11	1013	1	P	0.2	28.3	33.57	10.16	2.37	2.4	-	0.8	0.1	2.9	-	-	-	29	D.G.	2	3,8 7 3 NE	
-	-	2	P	0.0	28.2	35.57	10.75	2.44	1.4	-	0.6	0.3	-	-	-	-	-	-	-		
-	-	3	0	-	28.2	35.61	10.81	2.42	1.3	-	0.6	0.5	-	-	-	-	-	-	-		
-	-	4	0	-	28.9	35.62	10.76	2.45	1.5	-	0.6	0.1	-	-	-	-	-	-	-		
11/14	1048	1	P	0.0	23.2	34.09	10.23	2.41	1.9	-	0.9	0.7	3.5	-	-	-	57.8	26	D.G.	1 4,8 7 5 NE	
-	-	2	P	0.0	23.0	34.09	10.25	2.42	2.3	-	0.8	0.2	-	-	-	-	-	-	-		
-	-	3	0	-	24.1	35.16	10.61	2.42	2.7	-	0.6	0.5	-	-	-	-	-	-	-		
-	-	4	0	-	24.3	35.34	10.51	2.40	2.6	-	0.5	0.5	-	-	-	-	-	-	-		
12/8	1037	1	0	-	20.0	34.97	10.56	2.42	2.1	-	0.8	0.1	1.2	-	-	-	27.3	35	B.G.	5 1,6,8 6 6 ENE	
-	-	2	P	0.0	20.0	34.94	10.56	2.42	1.0	-	0.6	0.3	-	-	-	-	-	-	-		
-	-	3	0	-	21.0	35.55	10.80	2.42	3.6	-	0.5	0.1	-	-	-	-	-	-	-		
-	-	4	0	-	21.0	35.84	10.85	2.45	3.2	-	0.4	0.2	-	-	-	-	-	-	-		

STATION 23 (Continued)

Lat. 27°35.8' N.

Long. 83°08.2' W.

Date	Time	Depth	<i>Gymnocalium breve</i>			Depth of 78 feet			Phosphorus			Nitrogen			Water			Wind			Sea					
			C	M	C	Sal	Ca	Alk	Si	In	PO ₄	NO ₃	NH ₃	Org	In	Light	Transp	Color	CA	CT	Vi	Amt	Dir	Ant	Dir	
1961	1/12	1039	1	P	0.0	15.2	35.66	10.70	2.41	0.8	-	0.7	0.1	-	3.7	1.3	50.0	7	B.G.	6	4,6,8	6	4	ENE	2	ENE
-	-	2	P	0.0	15.2	35.68	10.65	2.42	0.8	-	0.4	0.1	-	-	-	-	-	-	-	-	25.8					
-	-	3	0	-	15.2	35.66	10.83	2.41	1.2	-	0.5	0.3	-	-	-	-	-	-	-	-	11.9					
-	-	4	P	0.0	15.2	35.82	10.90	2.43	1.9	-	0.5	0.1	-	-	-	-	-	-	-	-	6.1					
2/28	1054	1	P	0.1	18.6	35.66	10.99	2.44	2.2	-	0.5	0.1	0.0	9.1	0.1	55.3	7	L.G.	1	0,1,2	7	2	SE	2	SSE	
-	-	2	0	-	18.0	35.61	10.87	2.44	2.0	-	0.2	0.1	-	-	-	-	-	-	-	-	11.4					
-	-	3	0	-	17.2	35.52	10.80	2.43	2.4	-	0.1	0.1	-	-	-	-	-	-	-	-	3.3					
-	-	4	0	-	17.0	35.52	10.72	2.46	2.7	-	0.4	0.2	-	-	-	-	-	-	-	-	0.3					
3/2	1025	1	0	-	18.9	35.61	10.70	2.42	2.3	-	0.5	0.5	0.6	10.3	3.1	-	14	G.	3	1,6,8	6	4	N	2	NW	
-	-	2	0	-	18.7	35.61	10.80	2.43	1.8	-	0.8	1.0	-	-	-	-	-	-	-	-	-					
-	-	3	0	-	17.6	35.61	10.80	2.48	2.3	-	0.4	0.5	-	-	-	-	-	-	-	-	-					
-	-	4	0	-	17.4	35.73	10.90	2.43	1.8	-	0.5	0.2	-	-	-	-	-	-	-	-	-					
5/15	1029	1	0	-	25.7	36.04	10.97	2.44	2.9	-	0.3	0.1	1.8	11.3	4.6	66.7	38	B.G.	1	6	8	0	-	1	S	
-	-	2	0	-	24.5	36.04	11.05	2.44	1.1	-	0.3	0.5	-	-	-	-	-	-	-	-	31.2					
-	-	3	0	-	24.0	36.09	11.07	2.45	1.1	-	0.3	0.2	-	-	-	-	-	-	-	-	18.8					
-	-	4	0	-	24.0	36.11	10.92	2.44	0.8	-	0.3	0.2	-	-	-	-	-	-	-	-	9.6					
6/5	1024	1	0	-	26.6	35.66	10.85	2.44	2.4	-	1.2	1.2	-	33.7	1.3	68.2	35	B.G.	2	2,6	7	1	SE	1	SE	
-	-	2	0	-	26.4	35.66	10.85	2.4	2.6	-	0.9	1.3	-	-	-	-	-	-	-	-	31.8					
-	-	3	0	-	26.0	35.43	10.90	2.44	1.5	-	0.5	0.4	-	-	-	-	-	-	-	-	20.4					
-	-	4	0	-	25.2	36.02	10.81	2.44	2.6	-	0.8	0.3	-	-	-	-	-	-	-	-	8.7					
7/10	1026	1	0	-	29.6	36.31	10.97	2.46	2.7	-	0.4	1.0	2.4	18.1	12.0	43.9	35	B.	5	1,8	7	2	SSE	0		
-	-	2	0	-	29.2	36.31	11.00	2.45	1.5	-	0.4	1.0	-	-	-	-	-	-	-	-	19.5					
-	-	3	0	-	29.2	36.27	11.08	2.46	2.0	-	0.7	1.4	-	-	-	-	-	-	-	-	12.5					
-	-	4	0	-	28.6	36.27	11.10	2.45	2.2	-	0.4	0.3	-	-	-	-	-	-	-	-	7.1					

STATION 25

Lat. 27°35.8' N.

Long. 83°19.5' W.

Date	Time	Depth	Gymnodinium			Phosphorus			Nitrogen			Water			Sky			Wind			Sea					
			C	breve	M	*C	Sal	Ca	Alk	Si	In	PO ₄	NO ₃	NH ₃	Org	In	Light transm	Transp	Color	CA	CT	Vi	Amt	Dir	Ant	Dir
1960	1147	1	P	0.1	19.9	35.84	-	-	-	-	0.1	0.5	0.3	-	-	-	-	38	B.	6	-	-	3	NE	2	NE
-	-	2	P	0.0	19.8	35.84	-	-	-	-	0.0	0.3	0.2	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	3	P	0.0	19.8	35.81	-	-	-	-	0.3	0.5	0.3	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	4	O	-	19.8	35.75	-	-	-	-	0.1	0.2	0.5	-	-	-	-	-	-	-	-	-	-	-	-	
2/24	1139	1	P	114	15.6	35.08	-	-	-	-	0.3	0.5	0.2	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	2	P	0.0	15.6	35.26	-	-	-	-	0.2	0.5	0.4	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	3	P	1.2	16.2	35.82	-	-	-	-	0.2	0.4	0.3	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	4	P	2.6	16.2	35.95	-	-	-	-	0.4	0.4	0.1	-	-	-	-	-	-	-	-	-	-	-	-	
3/23	1130	1	P	800	16.6	34.61	-	-	-	-	0.4	0.6	0.1	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	2	P	B	15.6	34.63	-	-	-	-	0.4	0.4	0.1	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	3	P	0.8	15.1	35.34	-	-	-	-	0.1	0.5	0.2	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	4	P	20	15.1	35.70	-	-	-	-	0.4	0.4	0.1	-	-	-	-	-	-	-	-	-	-	-	-	
4/19	1141	1	P	0.6	22.0	35.14	10.60	2.41	0.6	-	0.7	0.2	0.0	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	2	O	-	19.6	35.14	10.44	2.42	1.0	-	0.4	0.2	0.2	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	3	O	-	16.4	35.62	10.58	2.42	0.7	-	0.5	0.2	0.2	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	4	O	-	15.8	35.17	10.41	2.42	0.6	-	0.5	0.2	0.2	-	-	-	-	-	-	-	-	-	-	-	-	
5/17	1021	1	P	0.0	23.4	35.43	10.70	2.43	0.2	-	0.6	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	2	O	-	22.3	35.52	10.65	2.41	0.8	-	0.4	0.2	0.2	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	3	O	-	20.4	35.93	10.92	2.41	0.4	-	0.4	0.1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	4	O	-	20.4	35.91	10.92	2.43	0.6	-	0.7	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	
6/15	1200	1	O	-	27.2	35.82	10.84	2.42	1.5	-	0.8	0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	2	O	-	26.0	36.04	10.90	2.43	1.7	-	0.6	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	3	O	-	25.6	36.18	10.90	2.43	0.9	-	0.5	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	4	O	-	23.4	35.95	10.74	2.43	2.5	-	0.8	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	
7/7	1009	1	O	-	29.6	36.22	10.99	2.44	0.5	-	0.8	0.1	2.9	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	2	O	-	28.1	36.22	11.04	2.43	1.3	-	0.5	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	3	O	-	26.5	36.17	11.06	2.43	0.9	-	0.6	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	4	O	-	26.5	36.29	11.02	2.44	2.7	-	0.5	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	
8/4	1205	1	P	6	29.2	35.66	10.79	2.40	2.2	-	0.7	0.1	0.0	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	2	P	1.3	28.8	35.70	10.85	2.38	1.8	-	0.4	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	3	P	-	28.5	35.79	10.84	2.40	2.0	-	0.1	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	4	P	0.0	27.6	35.79	10.90	2.41	1.3	-	0.5	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	
9/27	1052	1	P	0.0	28.1	35.73	10.92	2.38	1.8	-	0.5	0.2	2.4	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	2	P	0.0	27.6	35.73	10.76	2.32	1.7	-	0.4	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	3	P	0.0	27.5	35.77	10.76	2.34	2.2	-	0.3	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	4	O	-	25.0	36.04	10.90	2.38	4.1	-	0.6	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	
10/11	1059	1	P	0.0	27.8	35.75	10.70	2.43	1.4	-	0.7	0.1	4.1	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	2	O	-	27.6	35.71	10.84	2.45	1.3	-	0.6	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	3	O	-	26.3	35.86	10.72	2.46	1.0	-	0.6	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	4	O	-	26.3	35.90	10.75	2.46	1.6	-	0.5	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/14	1136	1	O	-	24.8	35.50	10.64	2.40	2.7	-	0.5	0.4	5.9	-	-	-	-									

STATION 25 (Continued)

Lat. 27°35.8' N.

Depth of 101 feet

Long. 83°19.5' W.

Date	Time	Depth	<i>Gymnodinium breve</i>			Sal			Ca			Alk			Si			Phosphorus			Nitrogen			Water			Wind			
			C	M	°C	In	Tat	PO ₄	In	Tat	NO ₃	NH ₃	Org	In	Light	Transp	Color	CA	CT	Vi	Amt	Dir	Amt	Dir	Amt	Dir	Amt	Dir		
1961	1/12	1130	1	0	-	16.1	36.11	11.05	2.43	3.0	-	0.1	0.0	26.9	-	B.	7	6,4,8	6	4	ENE	2	NNW							
-	-	2	0	-	16.1	36.26	10.81	2.42	1.8	-	0.6	0.0	-	-	-	-	-	-	-	-	-	17.3								
-	-	3	0	-	16.1	36.26	11.00	2.43	0.8	-	0.4	0.1	-	-	-	-	-	-	-	-	-	11.5								
-	-	4	0	-	16.0	36.09	10.87	2.43	1.4	-	0.8	0.2	-	-	-	-	-	-	-	-	-	3.7								
2/28	1157	1	P	0.1	17.8	35.88	10.93	2.44	1.1	-	0.2	0.1	-	8.9	1.6	47.6	32	B.G.	1	0,1,2	7	3	SSW	2.	SE					
-	-	2	0	-	17.2	35.91	11.03	2.44	2.3	-	0.3	0.2	-	-	-	-	-	-	-	-	-	19.6								
-	-	3	P	0.0	17.0	35.91	10.96	2.44	2.1	-	0.2	0.3	-	-	-	-	-	-	-	-	-	9.5								
-	-	4	0	-	15.4	35.91	11.08	2.44	2.8	-	0.6	0.2	-	-	-	-	-	-	-	-	-	0.9								
3/2	1115	1	0	-	18.2	35.88	10.90	2.44	2.1	-	1.0	0.2	-	2.4	9.1	-	-	-	-	-	-	28	B.	9	6,8	6	4	WNW	2	NNW
-	-	2	0	-	17.9	35.88	10.90	2.44	1.4	-	0.8	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
-	-	3	P	0.0	17.3	35.88	10.90	2.44	1.6	-	0.4	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
-	-	4	0	-	15.9	35.88	10.85	2.44	3.9	-	0.4	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
5/15	1121	1	0	-	25.7	36.29	11.11	2.44	1.8	-	0.3	1.2	0.0	10.4	1.1	69.2	46	B.	1	1,8	8	1	W	1	S					
-	-	2	0	-	23.7	36.26	11.08	2.44	1.9	-	0.3	0.1	-	-	-	-	-	-	-	-	-	38.5								
-	-	3	0	-	23.5	36.29	11.00	2.45	1.8	-	0.4	0.3	-	-	-	-	-	-	-	-	-	19.4								
-	-	4	0	-	23.4	36.20	10.98	2.43	1.5	-	0.3	0.0	-	-	-	-	-	-	-	-	-	7.4								
6/5	1116	1	0	-	26.7	35.99	10.81	2.45	1.7	-	0.8	0.9	-	27.9	1.3	60.0	41	B.	2	2,8	7	2	E	1	E					
-	-	2	0	-	26.2	35.91	10.88	2.44	3.1	-	0.6	0.9	-	-	-	-	-	-	-	-	-	28.0								
-	-	3	0	-	25.6	36.15	11.04	2.45	1.5	-	0.4	0.4	-	-	-	-	-	-	-	-	-	16.0								
-	-	4	0	-	24.6	36.18	11.00	2.45	2.5	-	0.6	0.5	-	-	-	-	-	-	-	-	-	6.5								
7/10	1115	1	0	-	30.7	36.38	11.10	2.46	2.1	-	0.3	0.2	0.6	16.1	4.4	44	B.	5	1,8	7	3	NW	0							
-	-	2	0	-	28.9	36.31	11.10	2.46	2.7	-	0.5	2.8	-	-	-	-	-	-	-	-	-	16.4								
-	-	3	0	-	28.3	36.31	11.10	2.46	2.3	-	0.3	1.3	-	-	-	-	-	-	-	-	-	7.8								
-	-	4	0	-	26.2	36.34	11.10	2.45	3.3	-	0.3	4.0	-	-	-	-	-	-	-	-	-	4.8								

STATION 27	Date	Time	Depth	Gymnodinium			Lat. 27°35.8' N.			Long. 83°30.5' W.		
				C	breve	M	°C	Sal	Ca	Alk	Si	In
											Transp	Color
1960	1/11	1234	1	P	0.0	20.7	36.08	-	-	-	0.1	0.2
-	-	2	0	-	20.2	35.97	-	-	-	0.3	0.3	0.5
-	-	3	0	-	19.8	35.84	-	-	-	0.3	0.5	0.5
-	-	4	P	0.0	19.8	35.86	-	-	-	0.2	0.5	0.4
2/24	1229	1	P	0.0	16.4	35.79	-	-	-	0.2	0.5	0.2
-	-	2	0	-	16.4	36.08	-	-	-	0.3	0.6	0.3
-	-	3	0	-	16.3	36.08	-	-	-	0.2	0.5	0.2
-	-	4	0	-	16.3	36.02	-	-	-	0.1	0.5	0.2
3/23	1217	1	P	300	16.6	34.56	-	-	-	0.3	0.6	0.1
-	-	2	P	70	15.6	34.63	-	-	-	0.3	0.4	0.2
-	-	3	P	20	15.5	35.55	-	-	-	0.1	0.3	0.2
-	-	4	P	16.1	15.5	35.64	-	-	-	0.3	0.3	0.1
4/19	1230	1	P	2.4	21.5	35.05	10.46	2.38	0.4	-	0.4	0.2
-	-	2	P	0.0	19.8	35.14	10.43	2.42	0.4	-	0.3	0.2
-	-	3	0	-	16.3	35.91	10.64	2.40	1.8	-	0.6	0.2
-	-	4	0	-	16.3	35.71	10.64	2.44	1.4	-	0.5	0.1
5/17	1112	1	P	0.0	24.1	35.46	10.77	2.29	0.2	-	0.4	0.4
-	-	2	0	-	22.5	35.55	10.73	2.31	0.5	-	0.6	0.2
-	-	3	0	-	18.6	35.93	10.81	2.37	0.7	-	0.3	0.2
-	-	4	0	-	18.5	35.90	10.90	2.42	2.4	-	0.4	0.2
6/15	1250	1	0	-	27.3	36.26	10.90	2.44	0.9	-	1.4	0.2
-	-	2	0	-	25.7	36.08	10.80	2.43	0.7	-	0.5	0.1
-	-	3	0	-	25.0	36.22	10.94	2.46	1.2	-	0.5	0.2
-	-	4	0	-	22.0	36.04	10.77	2.45	2.6	-	0.8	0.9
7/7	1055	1	0	-	29.2	36.29	10.94	2.44	0.7	-	1.0	0.1
-	-	2	0	-	27.8	36.22	11.10	2.43	0.8	-	0.4	0.1
-	-	3	0	-	26.7	36.22	11.20	2.41	1.1	-	0.5	0.2
-	-	4	0	-	24.6	36.13	10.95	2.44	2.8	-	0.6	0.6
8/4	1255	1	0	-	29.0	35.79	10.85	2.40	1.1	-	0.5	0.2
-	-	2	0	-	28.5	35.75	10.78	2.41	1.2	-	0.4	0.1
-	-	3	0	-	28.5	35.75	10.88	2.40	1.0	-	0.4	0.1
-	-	4	0	-	24.3	36.04	10.97	2.40	3.6	-	0.5	0.2
9/27	1158	1	0	-	28.4	35.73	10.90	2.36	1.8	-	0.3	0.1
-	-	2	P	0.0	27.7	35.68	10.85	2.34	1.6	-	0.4	0.5
-	-	3	0	-	25.0	35.73	10.76	2.38	2.0	-	0.3	0.1
-	-	4	0	-	22.9	36.13	10.94	2.42	3.5	-	0.5	0.1
10/11	1146	1	P	0.0	28.0	35.75	10.84	2.46	1.0	-	0.6	0.1
-	-	2	0	-	27.8	35.81	10.80	2.43	1.0	-	0.6	0.1
-	-	3	0	-	27.7	35.81	10.80	2.46	1.0	-	0.6	0.1
-	-	4	0	-	22.8	36.09	10.88	2.47	3.7	-	0.8	0.4
11/14	1227	1	0	-	24.9	35.99	10.70	2.44	2.0	-	0.4	0.1
-	-	2	0	-	24.8	35.99	10.74	2.44	2.0	-	0.5	0.1
-	-	3	0	-	24.8	36.06	10.80	2.45	1.5	-	0.4	0.1
-	-	4	0	-	24.7	36.06	10.77	2.45	1.3	-	0.5	0.4
12/8	1224	1	0	-	21.9	36.55	11.04	2.45	3.3	-	0.5	0.1
-	-	2	0	-	21.8	36.09	11.04	2.46	2.8	-	0.6	1.0
-	-	3	0	-	21.8	36.27	11.05	2.46	2.7	-	0.6	0.1
-	-	4	0	-	21.8	36.17	11.05	2.46	2.3	-	0.5	0.1

Sea

transm

B.G.

8

-

4

SE

-

15

B.G.

-

-

45

B.

4

-

41

B.

1

6

7

0

-

41

B.G.

-

49

B.

1

8

8

1

W

-

70

B.

5

8

1

WSW

2

SE

-

41

B.G.

6

1,2,4,8

7

2

SE

-

51

B.

4

1,8

7

0

-

70

B.

4

-

49.7

45

B.

2

NE

-

23.2

8.4

-

4.1

-

STATION 27 (Continued) Depth of 122 feet

Date	Time	Depth	Gymnodinium breve		Sal	C _A	Alk	Si	Phosphorus			Nitrogen			Water transm	Wind Dir	Amt	Dir	Amt	
			C	M					In.	PO ₄	I _{tot}	NO ₃	NH ₃	Org	In					
1961 1/12	1226	1	0	-	17.9	36.42	11.05	2.45	2.4	-	0.4	0.1	-	10.0	0.3	39.6	-	E.	7	6,4,0
-	-	2	0	-	17.9	36.18	10.90	2.44	2.1	-	0.5	0.1	-	-	-	16.7	-			
-	-	3	0	-	17.2	36.45	11.10	2.44	0.5	-	0.5	0.1	-	-	-	1.5	-			
-	-	4	0	-	17.0	36.17	10.64	2.44	2.5	-	0.6	0.1	-	-	-	2.9	-			
2/28	1230	1	P	0.0	17.5	35.84	10.96	2.42	2.6	-	0.1	0.1	-	6.7	1.0	35.7	47	S.	1	0,1,2
-	-	2	0	-	16.2	35.86	11.04	2.44	1.3	-	0.4	0.1	-	-	-	22.3	-			
-	-	3	0	-	16.2	35.86	10.90	2.42	2.4	-	0.3	0.2	-	-	-	4.5	-			
-	-	4	0	-	15.2	35.88	11.00	2.46	1.7	-	0.4	0.2	-	-	-	0.4	-			
3/2	1206	1	P	0.0	17.5	35.91	10.90	2.44	1.3	-	0.4	0.0	1.2	13.7	1.1	-	37	T.	9	6,8
-	-	2	P	0.0	17.2	35.84	10.80	2.44	1.5	-	0.5	0.3	-	-	-	4	NNW	1	NNW	
-	-	3	P	0.0	16.5	35.84	10.80	2.44	1.5	-	0.3	0.1	-	-	-	-				
-	-	4	P	0.0	15.2	35.91	10.84	2.44	1.4	-	0.3	-	-	-	-	-				
5/15	1214	1	0	-	24.5	36.29	11.10	2.44	1.5	-	0.3	0.1	-	8.4	2.6	59.2	42	E.	1	1,8
-	-	2	0	-	23.7	36.33	10.90	2.45	1.3	-	0.2	0.0	-	-	-	27.8	-			
-	-	3	0	-	22.3	36.29	10.91	2.45	3.2	-	0.3	0.2	-	-	-	16.2	-			
-	-	4	0	-	22.2	36.29	11.03	2.45	2.4	-	0.3	0.2	-	-	-	6.0	-			
6/5	1213	1	0	-	26.7	36.11	11.10	2.45	1.6	-	0.6	-	-	26.6	0.0	57.7	40	B.	1	2,8
-	-	2	0	-	26.1	36.00	10.85	2.44	1.6	-	0.4	0.7	-	-	-	25.0	-			
-	-	3	0	-	24.1	36.18	10.98	2.44	2.8	-	0.5	3.0	-	-	-	13.0	-			
-	-	4	0	-	23.9	36.27	10.95	2.49	3.7	-	0.7	0.3	-	-	-	4.3	-			
7/10	1207	1	0	-	28.4	35.79	11.00	2.44	1.3	-	0.6	-	0.6	13.7	1.3	41.7	56	E.	5	1,8
-	-	2	0	-	28.2	36.17	11.00	2.45	2.0	-	0.4	0.4	-	-	-	29.7	-			
-	-	3	0	-	24.4	36.31	11.02	2.44	2.6	-	0.4	0.4	-	-	-	5.0	-			
-	-	4	0	-	24.4	36.24	11.07	2.46	5.0	-	0.6	1.0	-	-	-	1.3	-			

Lat. 27°35.8' N.
Long. 63°30.5' W.

NNE

SW

E

S

SSW

J

STATION 27A		Depth of 150 feet		Lat. 27°35.8' N.		Long. 83°40.5' W.			
Date	Time	Depth	Gymnodinium breve	°C	Sal	Ca	Alk	Si	
			C	M					
1960 6/15	1340	1	0	-	27.0	36.29	11.03	2.44	0.7
-	-	2	P	0.0	25.7	36.26	-	-	-
-	-	3	0	-	23.7	36.29	-	-	-
-	-	4	P	0.0	21.4	36.00	10.84	2.42	1.9
7/7 1143	1	0	-	29.4	36.04	11.01	2.44	0.0	-
-	-	2	0	-	27.2	36.04	11.10	2.38	0.0
-	-	3	0	-	26.7	36.29	11.08	2.43	0.7
-	-	4	0	-	22.9	36.29	11.08	2.44	1.7
8/23 1138	1	0	-	29.6	35.43	10.80	2.41	0.7	-
-	-	2	0	-	29.2	35.37	10.71	2.41	0.7
-	-	3	0	-	25.2	35.34	10.80	2.41	1.3
-	-	4	0	-	20.5	35.37	10.71	2.41	0.8
9/27 1249	1	0	-	28.0	35.81	10.91	2.41	0.8	-
-	-	2	0	-	27.7	35.64	10.86	2.41	1.1
-	-	3	0	-	27.6	35.68	10.90	2.41	1.0
-	-	4	0	-	-	35.68	10.70	2.40	1.2
10/11 1238	1	0	-	27.6	35.81	10.64	2.46	1.0	-
-	-	2	0	-	27.5	35.90	10.76	2.46	0.7
-	-	3	P	0.0	26.4	35.90	10.80	2.46	1.3
-	-	4	P	0.0	-	36.15	10.90	2.47	3.9

STATION 27B Depth of 167 feet Lat. 27°35.8' N. Long. 83°50.5' W.

Date	Time	Depth	Gymnodinium			Sal	Ca	Alk	Si	Phosphorus			Nitrogen			Water	Transp	Color	CA	CT	Vi	Amt	Dir	Sea		
			C	M	breve					In	PO ₄	NO ₃	NH ₃	Org	NO ₂ -N	Tot	Si	Light transm	Sky	Transp	Color	CA	CT	Vi	Amt	Dir
1960 7/6	1226	1	0	0	-	29.8	35.93	11.03	2.43	0.9	-	0.4	0.1	0.6	-	-	-	58	B.	6	8	8	2	SW	2	W
-	-	2	0	0	-	27.5	36.29	11.05	2.44	0.9	-	0.8	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	
-	-	3	0	0	-	25.4	36.35	11.13	2.42	1.0	-	0.3	0.1	0.1	-	-	-	-	-	-	-	-	-	-	-	
-	-	4	0	0	-	20.3	36.06	10.84	2.42	2.2	-	0.9	0.4	0.4	-	-	-	-	-	-	-	-	-	-	-	
8/23	1222	1	0	0	-	29.6	35.43	10.80	2.42	0.8	-	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
-	-	2	0	0	-	29.2	35.43	10.73	2.42	0.8	-	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
-	-	3	0	0	-	23.9	35.97	10.95	2.43	1.0	-	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
-	-	4	0	0	-	19.3	35.43	10.70	2.43	0.9	-	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
9/27	1338	1	0	0	-	30.0	35.77	10.90	2.40	1.0	-	0.4	0.5	1.8	-	-	-	-	65	B.	2	1,8	7	0	-	0
-	-	2	0	0	-	27.8	35.71	10.84	2.39	0.8	-	0.3	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
-	-	3	0	0	-	25.6	36.08	10.85	2.41	2.1	-	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
-	-	4	0	0	-	-	35.68	10.75	2.40	0.9	-	0.4	0.1	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
10/11	1320	1	0	0	-	27.5	35.81	10.70	2.46	0.8	-	0.3	0.0	0.3	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
-	-	2	0	0	-	27.2	35.77	10.75	2.46	0.8	-	0.6	0.1	0.6	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
-	-	3	0	0	-	27.1	35.77	10.71	2.46	0.8	-	0.6	0.4	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	
-	-	4	0	0	-	-	36.24	10.95	2.47	3.8	-	0.8	0.4	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	